

shipping

MANAGEMENT

MAY 1956

COMBINED WITH

FREIGHT • EXPRESS
PARCEL POST • MAIL

PAYOUT

air-cargo report and analysis

and *The Air Shipper*

JUN 12 1956

Cont. Copy

THE "HOW-TO" PUBLICATION OF
PACKAGING, TRAFFIC AND SHIPPING



As a further step to speed on-and-off loading of DC-4 Cargoliners, United Air Lines began using mobile belt conveyors in 1949. They are an essential tool in present cargo operations. See 30th Anniversary story, Page 19.

READERS' ROUTER

TO SEE PAGE

TO SEE PAGE

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**Every
LTL Shipper
needs a friend!**

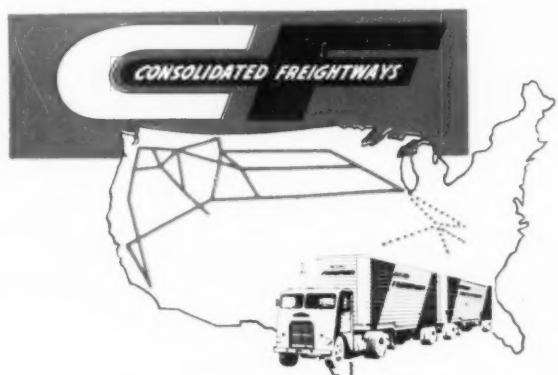
When your shipping room is bustling with orders for customers at a hundred destinations—you need a friend. Some *one* carrier who can easily, efficiently and economically assume the responsibility of your direct distribution. It's here that Consolidated Freightways can serve you best—because

CF serves more points direct than any other carrier in the West. So when you ship LTL* or full load, one shipment or one hundred, call CF—every shipper's friend. CF offers you direct routing and fast daily schedules PLUS one carrier convenience and one carrier responsibility.

*Less Than Truck Load

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CITY, MINNEAPOLIS, ST. PAUL, CHICAGO**

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IN 4 COLORS

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- ★ DOUBLE DUTY ADVERTISING TAPE
- ★ SELLS AS IT SEALS!

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◀ TOPSIDE:
ADVERTISE FREE

- ★ Every carton and package leaving your plant carries your company's name and 4-colorful advertising message in black, blue, red and yellow.
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- ★ Our creative art staff will prepare distinctive designs to fit your specific need. Free ideas and sketches submitted with 25 carton orders.

◀ UNDERSIDE: SEALS SECURELY

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- ★ Dust and dampness are locked out.
- ★ Top quality Kraft sealing tape: easy to apply, non curling uniformly tenacious.

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THE UNITED STATES.

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MEN — METHODS — MATERIALS

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SLICK

ANNOUNCES...

Shown here are sensational major innovations by Slick that reduce shipping costs, air shipping time, and open up additional shipping areas served directly by Slick.



Shown here are but a few of the new Slick services. Not shown are Slick's new direct flights from New England cities to the Midwest, from Texas to the Midwest, and from Texas to the West Coast.

NEW Overnight Service!

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Now... you can ship much faster by air and for less cost!

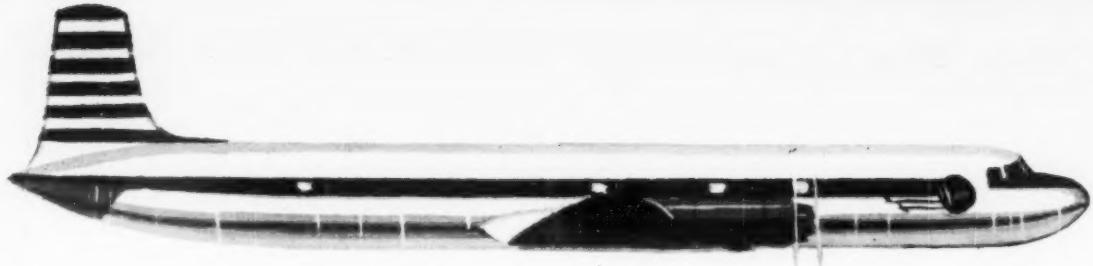
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NEW Overnight Service!



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COLUMBUS
inbound service

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BALTIMORE
service
inbound
and out!

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Call your local Slick station for complete details immediately!



SLICK

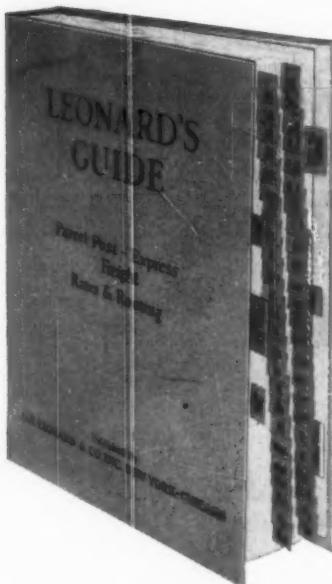
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cold-proof...odorless gummed sealing tape!

It's the latest development from Hudson's research laboratories—gummed tape with new, exclusive RENACEL adhesive!

RENACEL wets out fast, evenly and completely—even with ice water! You can seal instantly anywhere—in refrigerated or cold shipping rooms—without heating dispenser water or using costly wetting agents.

RENACEL is a gummed tape adhesive without any odor or scent. Your personnel will welcome RENACEL's unique, odorless quality, because it insures fresher and cleaner air in your shipping room. When tape

made with odorless RENACEL seals your cartons, you know the contents will arrive safe and protected—free from odor.

RENACEL provides other unequalled advantages too. Teamed with Supple-ization (another Hudson exclusive), it gives tape a smooth, silky feel—makes it even more pliant. The tape molds to the carton, handles easier and faster... Tape can be stored safely, longer. The rolls always open easily, dispense smoothly... Bonding strength actually increases with time. Tape won't peel. Cartons remain sealed.

Now—at no additional cost—you can have more efficient sealing... more protection for your cartons... impressive dollar savings in tape! Specify one of Hudson's Gummed Sealing Tapes—Blue Ribbon for speed in complete closure—Orange Core for economical standard sealing.

For FREE TEST SAMPLE of Hudson Gummed Tape with RENACEL adhesive, write on your letterhead to Dept. S65. Request Blue Ribbon or Orange Core.

RENACEL is Another Product of
Continuing Research by Hudson.



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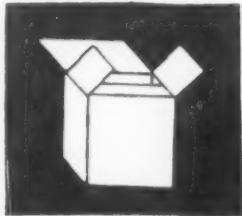
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ALL-AROUND PROTECTION against moisture is offered by these water-proof papers made in conformity with government specifications. They are outstanding for wrapping, covering and car lining purposes. For FREE INFORMATION, check 4.

NEW HAND BOOK for Shipping Departments features general information on packing and marking shipments and data on stencil cutting machines, electric tape machines, fountain brushes, stencil inks, markers, oil board and other products. Send for FREE copy today by checking 5.

SELL AS YOU SEAL! Make colorful advertising vehicles out of your packages and cartons by using this four-color advertising tape. This gummed kraft sealing tape is dressed up with attractively prepared art work created without extra cost. For FREE INFORMATION, check 6.

FREE 10 DAY TRIAL OFFER. Check No. 10 on the card and learn how you can try this label gluer in your own plant under your own working conditions with absolutely no obligation. You will also receive details of this system of tying your labeling in with your office and invoicing procedure, saving time and money, and eliminating error. This hand operating label gluer will enable you to do every type of labeling job at a saving

ONE-HAND TACKING is faster and cheaper. This product has rapid gripping action and take-up jaw for low maintenance. 36 different models and 80 staple sizes for any use. Check 8 for FREE BOOKLET.

TROUBLE-FREE ADDRESSING without labels, tags and bulky stencil boards is offered by this concern. All you have to do is imprint with a small hand printer and an inexpensive paper stencil the ship-to-address directly on the carton. This operation is clean, fast and very inexpensive. Check 9 for FREE information.

MAILING & STORAGE BAGS are produced by this well-known textile bag manufacturer. Offers complete line of cotton bags designed for shipping, warehousing and parts purposes at truly competitive prices. Design and printing services also available. Send for FREE SAMPLES, literature and price list by checking No. 10.

INTERNATIONAL SHIPMENTS are this airline's specialty. Size and weight are no problem. They ship anywhere and have direct air routes to Europe and the Middle East. Full details FREE by checking 11.

LOW COST SEALER offered by manufacturer was two years in the making. Has all the features of heavy duty machines with one exception: the price. Features include, visual auxiliary water reservoir, feed stop for predetermined lengths up to 30", dispenses 1" to 3" width tape. For FREE BOOKLETS check 16.

SUPERB CUSHIONING protection to fit practically any type of products or assortment. This interior cushioning resists all forms of shock and protects the finish of the product as well. This company also gives complete package engineering design and service by experts. For FREE information check No. 17.

DIRECT ROUTING and fast daily schedules to 58 key cities from the Pacific Coast to the Great Lakes and the East for less-than-truckload shippers. Safe and quick delivery is the foremost objective of this company. Its terminals have the latest equipment for mechanized or direct cross dock loading. Send for FREE information. Check 18.



JUST PHONE this firm and they do the rest. They pick up LCL freight shipments regardless of destination, and they deliver through 150 stations covering 30,000 communities throughout the country. For FREE information immediately, just check 12.

REAL ECONOMY in automatic tape dispensers is offered by this concern. This machine dispenses up to 36" in one stroke. It automatically measures, wets, cuts and ejects gummed tape widths of 1 1/2" to 3". Stainless steel cutting blade and end-to-end moistening are other key features. For FREE 10-day trial and literature, check No. 13.

FOUNTAIN STENCIL BRUSH provides dependable stenciling and marking. Has a controlled automatic ink feed and works fast. Check 14 for FREE literature.

CUT SEALING TIME BY two-thirds. Use modern way to seal — with two strips instead of six. Made possible by tape's precisely laid 2-way reinforcing. For FREE SAMPLES check 15.

CUT SHIPPING TIME by as much as 33 percent. This railroad, one of the oldest, up-to-date and reliable in the nation, specializes in less-than-carload shipments. Check No. 19 for free information.

QUALITY GUMMED TAPE that offers color variety and uniformity is what you look for in a tape. For FREE SAMPLE ROLL and Color Swatch Book, check 20.

FLEXIBLE CORRUGATED wrapping paper is the faster, more economical and time-saving answer to packaging problems. Unique scientific scoring method produces higher flutes better cushioning. FREE INFO, check 21.

TRAFFIC COURSE at home compiled by 175 of the country's most prominent traffic executives. This correspondence course is given under the auspices of a leading university to help men now in the shipping and traffic fields get a better understanding of rates, tariffs, regulations, etc., and get ahead. For FREE 48-page book, check No. 22.

AUTOMATIC TACKERS . . . that offer speedy, one hand operation enable you to do more work with fewer workers. This company offers a wide range of air, gun and hand tackers and has a money-saving FREE maintenance service. For complete story FREE, check 23.

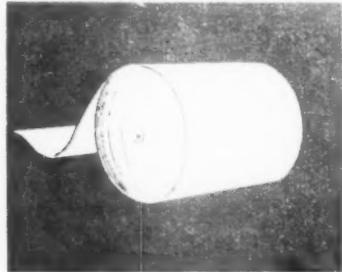
USE REINFORCED gummed tape to cut sealing time. Only two strips are used because the tape is backed with rayon yarns . . . the same yarn used in the best auto tires for superior shock absorbence. FREE SAMPLES by checking 24.

DUST-TIGHT and moisture-resistant best describe the condition of packages sealed with these tough, long-fibered gummed tapes. They are economical to use and assure added savings by protecting against damage in handling and transit and against pilferage. Advertising messages can be printed on the tape. Check 25 for FREE brochure.

SHIPPING INFORMATION—For parcel post, express or freight rates and routing. This best known of all shipping books is a simple, easy-to-use loose-leaf guide frequently revised. For free information, check 26.

"STOP LABELING WITH DOLLAR BILLS." This is the intriguing title of a FREE 4-page folder that tells you exactly how to do it . . . how to speed up attaching labels to packages, glass, metal, wood, steel, etc., and how to save by using ungummed labels. This folder can save you thousands of dollars, so be sure to check No. 27.

PUSH A BUTTON and get the exact tape you need. Actual reports show a 20% to 45% saving in time and tape. Learn about this machine. FREE TRIAL OFFER in your plant by checking 28.



SEAL INSTANTLY without heating dispenser, water or using costly wetting agents. This tape is odorless and adheres quickly. It handles easier too. For FREE test sample, check 29.

CUT CARTON COST by covering old shipping marks. This amazing product dries quickly to the carton color. You can stencil, tape or mark right over it. FREE DATA: check 30.

SHIPPERS & PACKAGING SUPERVISORS — Write for illustrated broadside CP-8326, giving uses, specifications and prices on dispensers for gummed and pressure-sensitive tape by world's largest manufacturer. FREE of charge. Just check 31.

MEN — METHODS — MATERIALS

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PROTEX pads and blankets give you the maximum interior cushioning protection obtainable and fit virtually any product or assortment you can name! The cost is substantially lower than most other forms of interior cushioning and take only a fraction of the time to pack. Avail yourself of this important money-saving clean method of packing. The protection your products get is superb...resists all forms of shock and protects the finish of the product as well. Ease of packing, availability of ample supplies of packing material on hours notice are important too...you don't have to order far in advance of production or store supplies all out of proportion to their rate of consumption.

Consult us—Present your packing problems to us for complete package engineering design and service by experts. We will show you how to improve package performance and save money too!

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next time get... Seal-O-matic

Here's why Seal-O-matic saves you time and money!

- The only tape machine selling for less than \$75.00 dispensing up to 36" in one stroke!
- Automatically measures, wets, cuts, ejects gummed tape widths 1 1/2" to 3".
- 2 pure bristle brushes plus scientifically designed pressure weight assure efficient end-to-end moistening! Removable water tank, easily cleaned. Constant water level.
- Lifetime stainless steel cutting blade.
- Easy to read measuring scale.
- Fully enclosed streamlined body keeps tape fresh and clean. Attractive Hammertone Gray finish.

10 DAY FREE TRIAL: Order either machine, remit in 10 days or return—no obligation!

Consult your local distributor or WRITE for catalog on complete line: Automatic and Manual Tape Dispensers, Moisteners, Carton Openers, Safety Knives, etc.

Seal-O-matic DISPENSER CORPORATION
Formerly Lipton Manufacturing Co.
Dept. SM-5, 52 West Houston Street, New York 12, N. Y.
Our 22nd Year!



SENIOR 3" for regular tape

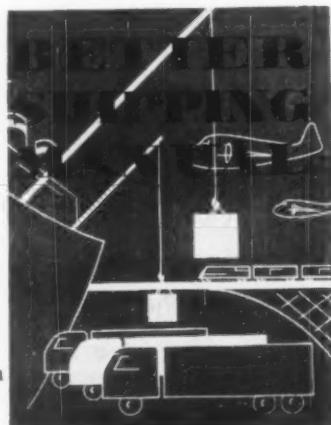
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- Rule 41 Amendment: Reinforced Gummed Tape
- Air Cargo
- Surface Transportation
- Warehousing
- Shipping Department Efficiency
- Packing, Sealing, Marking
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- Containers and Testing

Plus a complete Buyers' Guide to Equipment, Supplies, Service and other invaluable features.

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PACKING A PUNCH

MAY, 1956

IF THE STEEL INDUSTRY cooperates by supplying sufficient amounts of steel for railroad freight car construction, then car deliveries can be greatly expedited. So declared Richard G. May, vice president in charge of the Operations and Maintenance Department, Association of American Railroads, at the annual meeting in March of the New England Shippers Advisory Board.

Asserting that more freight cars were ordered during 1955 than in any year since 1912, Mr. May said that deliveries have been low so far. A total of 135,293 new cars were ordered, but only 4,350 cars were actually delivered in January and 4,800 in February of this year. "The railroads have sought and are receiving cooperation from the steel industry in increasing the amount of steel available for car construction, and it is hoped that new car production will improve from now on," Mr. May said.

CREATION OF A TRANSPORTATION Research and Development Section within the Traffic and Transportation Department of Koppers Company, Inc., caught our interest recently.

According to Vice President James F. Haley, this section will study and develop solutions to complex transportation problem, such as economics relating to plants and warehouses and their locations, the effects of freight equalization as compared with other means of allocating transportation expense, and the development of new distribution practices and management techniques. The section will also make long-range studies of the impact of transportation on the overall efficiency of other operations in the company.

Wallace P. Neth, vice-president-traffic for Seaboard & Western Airlines, recently told a seminar in air transportation at George Washington University, Washington, D. C., that the freight forwarder is an important adjunct to the international air freight carrier.

Speaking on International Air Cargo, before a group of 107 transport specialists, Neth, one of the founders of Seaboard & Western, said the freight forwarder is "an expert in

(Continued on Page 34)

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shipping MANAGEMENT

COMBINED WITH

PAYOUTLOAD & The Air Shipper

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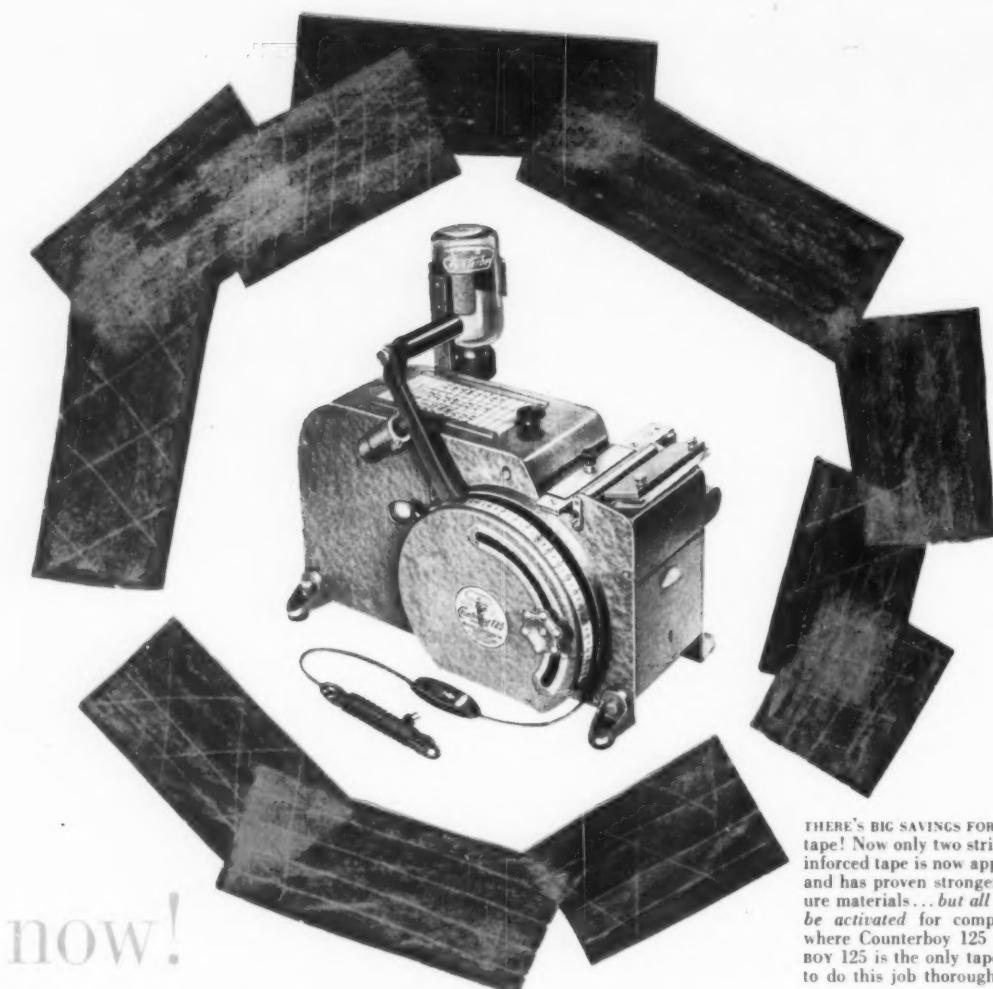
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now!

the one safe dispenser
for moistening

reinforced tape

Don't gamble with your shipments! At last here's a tape dispenser especially designed to completely activate the heavy glue coating on reinforced tape! All others were designed only to moisten light glue coated 60 lb. tape — *not* heavy glue reinforced tape.

COUNTERBOY 125's exclusive THREE DIMENSIONAL, 5 SECOND MOISTENING GUARANTEES COMPLETE SECURITY — SPEEDS SEALING! Here's why, special built-in adjustable unit spreads 140° heated water over the complete length, full width of tape — penetrating deep into the hard, dry, thick glue. *Within five seconds* there's a flowable mass of glue ready to grip and penetrate.

Better Packages, Inc.
SHELTON, CONN.

THERE'S BIG SAVINGS FOR YOU with reinforced tape! Now only two strips are necessary. Reinforced tape is now approved by all carriers and has proven stronger than all other closure materials... *but all the heavy glue must be activated* for complete closure. That's where Counterboy 125 comes in! COUNTERBOY 125 is the only tape dispenser designed to do this job thoroughly and effectively.

Make sure with COUNTERBOY 125 today!

Try our 60 second test! We'll adjust a Counterboy 125 for the glue on your reinforced tape—apply to your carton or package surface and show you 60 seconds later how our 125 converts dry, hard glue into a permanent weld.

We don't sell reinforced tape! However, we'll furnish you with test samples and tell you where you can get it.

Try this amazing test soon.

Please have a Better Packages' Representative call on me.

NAME _____ TITLE _____

COMPANY _____

STREET ADDRESS _____

CITY _____ STATE _____

... for more details check #31 on HELP-O-GRAM card.

SHIPPING MANAGEMENT, MAY, 1956



The products of some 387 exhibitors, occupying over three acres of floor space on both levels of Atlantic City's Convention Hall, were shown at the AMA's Silver Anniversary National Packaging Exposition. Here are some of the crowds milling around the exhibits on the main floor.

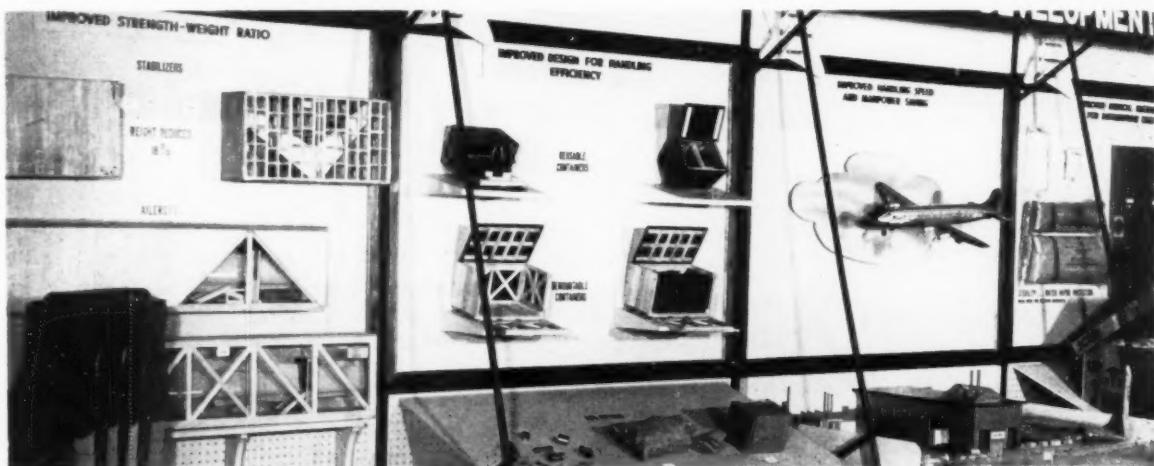
28,000 Attend AMA's Biggest Atlantic City Exposition

ATTENDANCE AT THE American Management Association's Silver Anniversary Packaging Show, April 9-12, reached an all-time high for Atlantic City AMA shows. Some 28,000 people crowded into Convention Hall for the three-day display of the latest developments in the packaging, shipping, handling and warehousing of industrial and consumer goods. A total of 387 companies sponsored exhibits in over 125,000 square feet of floor space on both levels of the three-acre exposition hall.

The Armed Forces Packaging Exhibit, shown below, included examples of savings in costs, weight and space, which have been effected recently by package engineering. The exhibit graphically presented

A simultaneous attraction for show visitors was the National Packaging Conference which was addressed by some of the foremost authorities in the fields of industrial packing and materials handling. The story of how Libby-Owens-Ford Glass Co. provides maximum protection in packing and transit for its automotive windshields was unfolded by Melvin C. Koester, packaging and material-handling engineer. Douglas Aircraft Company's experience in achieving a streamlined materials handling program as a result of

improvements which have been made in strength of packaging, design, handling ease and speed.





These photos are of Packaging Conference speakers. Above, left: Richard J. Hennessy, Lederle Laboratories Division of American Cyanamid Co.; Melvin C. Koester, Libbey-Owens-Ford Glass Co.; and Donald Macaulay, Paper & Printing Quality Control, Inc. In picture at right,

John A. Newton (left), factory manager, and B. A. Cummings (right), manager of production control, Thompson Products, Inc., who discussed the packaging of engine parts.



Leading off the conference were: Richard Manville, research consultant, and T. E. Mechem, El Segundo Div., Douglas Aircraft Co. Mr. Mechem covered the topic, "In-Plant Parts Handling." Participating in a panel discussion on their respective companies' packaging

committees were the speakers at right: William T. Egan, Colgate-Palmolive Co.; Clayton Henrichs, Ayerst Laboratories, Inc.; and F. H. Wiley, International Harvester Co.

its packaging operations was explained by T. E. Mechem, supervisor of plant engineering. Dr. Frank C. Campins, president of Polymer Industries, Inc., discussed ways to attain trouble-free operation with adhesives. Other speakers were:

John A. Newton and B. A. Cummings of Thompson Products, Inc. on "Packaging Engine Parts for Original Equipment Manufacturers"; William T. Egan of Colgate-Palmolive Co., Clayton Henrichs of Ayerst Laboratories, Inc., and F. H. Wiley of International Harvester Co., on "The Organization of a Packaging Committee."

One of the most detailed exhibits was that sponsored by the armed forces which showed examples of savings in costs, weight and space which have been effected through package engineering studies.



This photo shows part of the Armed Forces Packaging Exhibit. Illustrated is a newly developed method of interior cushioning for large electron tubes which resulted in substantial savings. The new method was devised by Container Laboratories, Inc. for the Navy Bureau of Ships.

Even Cement Is Shipped By Air

Unexpectedly, cement is one of the newest commodities to turn to air freight. A 20,000 pound shipment of cement was flown recently by Riddle Airlines from New York to Miami, enroute to Aruba for a construction project there.

A spokesman for the air carrier said, however, that this was not the first time construction materials have been shipped by air. Ceramic tile, for example, was flown by Riddle from Puerto Rico to Miami for the Eden Roc Hotel when it was under construction. The hotel used air freight both for speed and to reduce breakage.



(1) Mr. Karl Schaffer, Packing Supervisor, unloads cart load of binders on shipping table.

(2) Die cut flat folding box is used for single post binders.

(3) Binders are placed in die cut box which is closed along scored lines.

(4) Die cut box is closed, preparatory to sealing.



(5) Mr. Schaffer demonstrates correct length of reinforced tape (in this case 13") for this size carton.

(6) Tape applied to carton. Note overlap.

(7) Here tape is shown with seal complete. This is all the overlap needed.

(8) Package is weighed at zoning scale by Joe Carbone, packer.

Three Dispensers Handle Volume Sealing In Small Shipping Area

PRACTICALLY EVERY LARGE BUSINESS organization in the United States uses the loose-leaf business services in binders published by Prentice-Hall. The books and the binders are stored, ordered and shipped from Prentice-Hall's Varick St. shipping center in New York City. As in their main plant at Englewood, New Jersey (see Shipping Department of the Month, Shipping Management, January, 1955), Prentice-Hall uses all the latest labor-saving and improved shipping devices in the Varick St. center.

All the loose-leaf business service binders are sent out from a small centralized shipping area. Here, with just three dispensers using reinforced gummed tape, a large and continuous packing, sealing and shipping job is performed every working day. Parcels are shipped by the following means: 70% parcel post, 25% Railway Express, 5% by air (including express, freight, parcel post).

Containers for the binders and their accompanying fillers have been designed according to

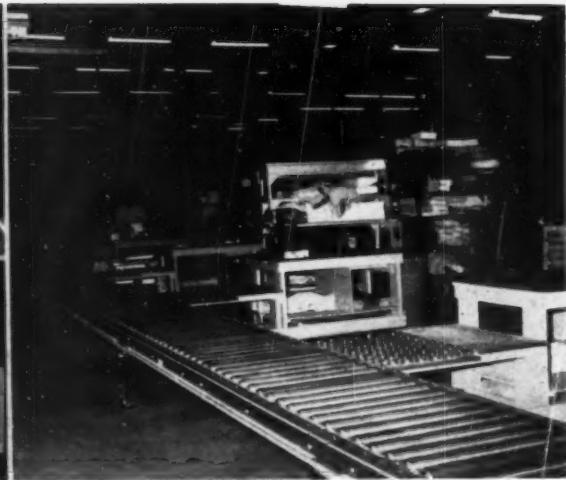
specifications worked out by Prentice-Hall's own engineers. Each binder unit is called a "post," and cartons are identified by the various post sizes used, 1, 2, 3, 4, 5, 6 and 8. The two-strip sealing method with reinforced tape is employed for all box sizes except the smallest, which requires only one-strip sealing. The one post package uses a 13" strip of reinforced tape. Tape lengths for each strip applied to cartons using the two-strip method are as follows: 22" for 2 post cartons, 26" for 6 post cartons and 32" for 8 post cartons.

New machines with special moistening units and heavier blades have been especially purchased for use with the reinforced gummed tape. According to Mr. Stephen R. Atsaves of Prentice-Hall's Office Management section, the switch to reinforced tape closures has saved the full-time labor of at least one man. Formerly a packer had to devote his full time simply to closing cartons, while another man packed. Now one man

(Continued on Page 20)



The Sperry & Hutchinson Company has designed its own packing tables, specifically to increase efficiency for the packer. In the table shown at left all packing and sealing materials are within finger-tip reach. This is a mail order packing table, for small quantity shipping. The scene at right shows part of the branch or quantity packing



section. Branch packing table is simpler in lay-out as most of goods goes in corrugated containers in the larger sizes. Note ball-bearing transfer unit and gravity conveyor to ease movement of containers to scaling area. Way in background S & H's specifically designed magnesium loading car is visible.



Custom Designed Warehouse Is Planned For Future Expansion

THIS IS, IN A WAY, a story about women. Even though it involves man's work in a man's world.

It starts with a woman packaging engineer, one of the few in her profession, who has achieved eminence in her calling, is a vice president and program chairman of her professional society, a thinker, a planner, a doer. The story concerns many women: the women who receive Green Stamps when they purchase merchandise at stores affiliated with The Sperry & Hutchinson Company's premium system. Mrs. Elaine Pitts, Packaging Engineer for Sperry & Hutchinson, is V-P and Program Chairman of the Illinois Region of the Society of Industrial Packaging & Materials Handling Engineers. Sperry & Hutchinson has eight warehouses and 460 "branches" through which its premium merchandise is distributed. Mrs. Pitts' work concerns these warehouses of S & H.

In 1952 S & H's Chicago warehouse and shipping center opened with 110,000 square feet of space on a single floor. Only last year its Annex, an addition larger than the original building: 160,000 square feet, was opened. The total of 270,000 square feet of receiving, warehousing,

packing and shipping space services about 114 branches of the nation-wide Green Stamp chain. About 10% of this center's business consists of individual mail orders to consumers who do not have ready access to the branches. Chicago is easily the largest of the company's warehouses. The other seven are located in strategic areas of the United States.

Sperry & Hutchinson catalogues between 1200 and 1500 items, mostly name brand merchandise. For the most part high volume acceptance items are carried, so women can compare the value of premiums received with local merchandise prices.

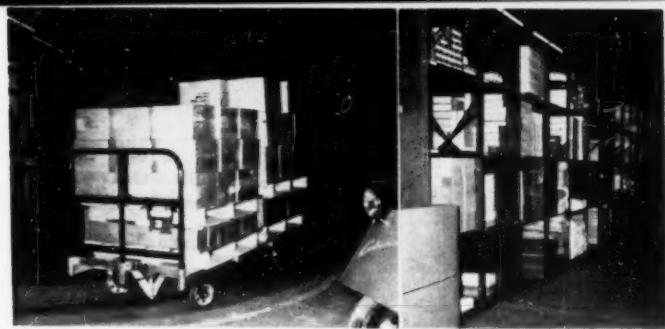
Mrs. Elaine Pitts, Packaging Engineer for S&H, is shown hard at work at the drafting table in her office. Many creative shipping ideas installed by the firm originated in this office.



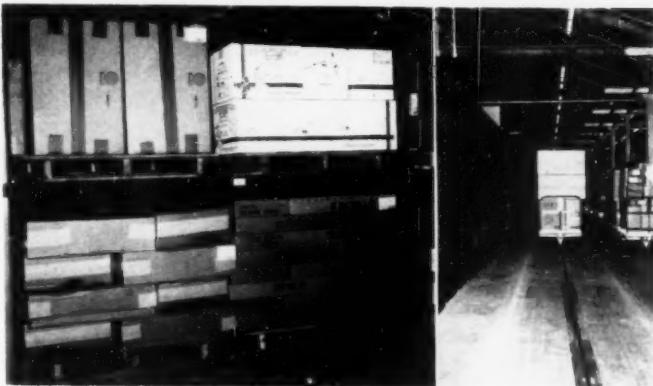
Articles shipped consist largely of soft goods and relatively light weight hard goods. Heavy weight packing is confined to metal advertising signs, brackets and stands provided to stores and branches to advertise the Green Stamp system.

The Chicago shipping center and warehouse is so large that executives who inspect the plant are provided with a small mechanized conveyance similar to the recently popularized "golf carts." There is ample room for 12 railroad cars to load or unload simultaneously at the left side. Ten docks at the rear provide space for truck receiving, and ten docks at the right front are for truck shipping. (See diagram). The operation is a back-to-forward movement with receiving taking place in the rear, warehousing in the center, and packing and shipping up front. Circling the interior of the entire shipping center is the electric tow conveyor line which is at the heart of all shipping and receiving. Conveyor trucks are loaded and pushed on the line for automatic pick-up. At packing and shipping areas the conveyor trucks are pulled off the line and their loads discharged. Empty conveyor trucks placed back on the line, return to filling areas.

Many months of scientific study and planning went into preparations for the giant warehouse and its annex. In addition to various staff members who worked with Mrs. Pitts in planning the



Left: Goods can be stored anywhere there is space in warehouse. Carton control system records placement. Note palletization of goods. Small cards attached to cartons indicate month received, by color. Right: Tow conveyor truck comes down the electric conveyor line.



Left: Tow conveyor truck rounds bend, headed for packing zone. Right: Open stock shelves at mail order packing zone. Some tow conveyors are unloaded at this point, and cartons unpacked in readiness for small quantity shipping.

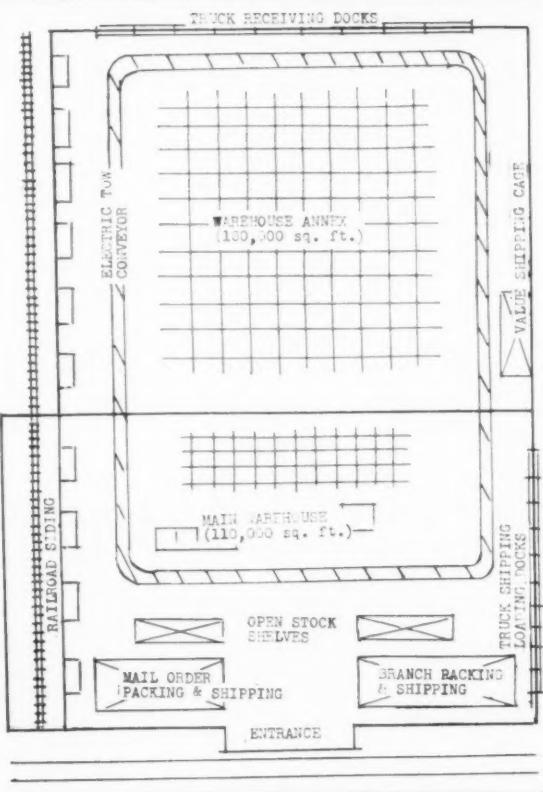
lay-out for maximum efficiency, management consultants Cresap, McCormick and Paget advised. Plans and blue prints continue to issue from Mrs. Pitts' modern, fluorescent lighted office, as the company requests changes and improvements in the shipping center's operation. Constant planning is necessary to take into account the ever-increasing volume of goods handled by the company. Plans for all warehouses include allowances for projected increases in the volume of goods to be handled.

Two major considerations clearly illustrate S & H's scientific approach to problems of distribution. These are its containerization program, and systematized warehouse control.

Since 90% of S & H's shipping is in quantity to the branches it has long been decided that unitization and palletization in shipping, receiving, and warehousing is the most effective handling method. To achieve this goal a containerization program was set up to store and ship as much goods as possible in corrugated containers. Suppliers are urged to ship items to S & H packed in specific quantities in corrugated containers. This makes possible pallet and fork lift handling

(Continued on Page 36)

Left: Floor plan (not to scale) indicates general arrangement of Sperry & Hutchinson warehouse and shipping center. Goods move from receiving at left and rear, through warehousing to packing and shipping at front and right. Tow conveyor line moves in clockwise direction around warehouse, co-ordinating with left-to-right, rear-to-front movement.



Redesign And Automatic Sealer Simplify Packing of 75 Box Sizes

By GARDNER M. ALISON
Planning Engineer, Lamp Dept.,
Canadian General Electric Company Ltd.



This article is edited from a speech given by Mr. Alison at a recent convention of the Packaging Association of Canada in Toronto. The article concerns packing, warehousing and shipping of bulbs and lamps by the Canadian General Electric Co.

THE MANY VARIED TYPES OF LAMPS, or electric light bulbs, manufactured in our Canadian factories require from 75 to 90 different sizes of boxes for packing.

Of the lamps manufactured, six types represent 41 per cent of our total business—the well-known 25, 40, 60, 100, 150 and 200 watt lamps. These are manufactured at the Oakville, Ontario, plant where the latest techniques in packaging, handling and warehousing are in use.

At the end of the packing line, after boxes of lamps have received final inspection, there is an accumulation area, with several parallel lines of roller conveyors, each line holding 20 to 25 boxes. Boxes have been re-designed for common height, and no vertical adjustment is needed on the sealing machine, regardless of type of lamp.

Widths of packages differed widely at one time, but one manufacturer of case-sealing machines incorporated a device which automatically adjusts to accept boxes of varying widths. The machine will seal 25 boxes a minute.

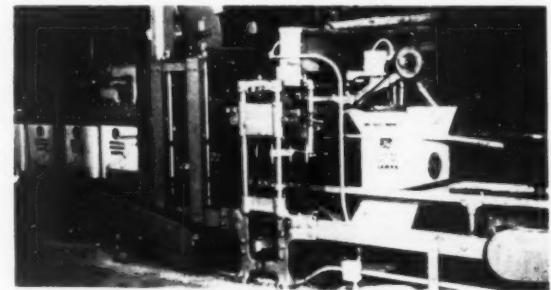
Costs Cut by Automatic Sealer

Boxes now arrive at the case-sealer from the factory, in any order. When sealed, they are put on pallets according to wattage, and the man loading the pallets is also able to do required maintenance for the sealing machine which, because it is automatic, no longer requires an oper-

ator. On the overall, there has been a considerable saving on packaging materials since we installed the automatic sealer and re-designed our boxes.

In planning our warehouse to fit in with the new packaging system, two of the prime objectives were: economical ceiling height, and good stock rotation. Ceiling height was readily established once we had arrived at a uniform box

(Continued on Page 38)



Cartons of bulbs are closed by this automatic sealing machine.



After sealing, cartons are stacked on pallets as above. Pallets ride on two parallel lines of conveyors as below.





Progress in the air cargo industry is dramatized by these two photos. At left is one of the Swallow biplanes used in the 1920's by Varney Air Lines to transport air mail. At right is a big DC-4 Cargoliner being loaded by means of a mobile belt conveyor. These conveyors are an essential tool in present-day cargo operations.

30 Years of Air Shipping Celebrated

United Air Lines Observes Anniversary of Pioneering Flights

PLANES HOISTED CARGOES long before the airline industry had its birth 30 years ago in the historic flight of Varney Air Lines, a parent company of United Air Lines.

Sixty pounds of blue silk, valued at \$1,000, were carried in a Wright biplane from Dayton to Columbus, Ohio, on November 7, 1910. Al Welsch, the pilot, was accompanied by Phil O. Parmalee, one of Orville Wright's first flying students. The silk was cut into neckties by the Morehouse Martens Company of Columbus. Each tie had a label, attesting to its air journey.

A supply of Swift & Company hams and bacon was flown from Tampa to St. Petersburg, Fla., on January 12, 1914, ostensibly to replenish a grocer's dwindling stocks. Newspapers of the day reported that the telegram announcing the departure of the planes was received 40 minutes after the aircraft arrived.

Air Mail Played Big Role

An ambitious effort to establish air express service between New York and Chicago in 1919 proved to be abortive. A multi-engine Handley-Page, built as a World War I bomber, was loaded with packages at Hadley, N. J., on November 10. The take-off was smooth and a new industry seemed in the making but the mammoth plane was forced down by stiff headwinds at Mt. Jew-

ett, Pa.

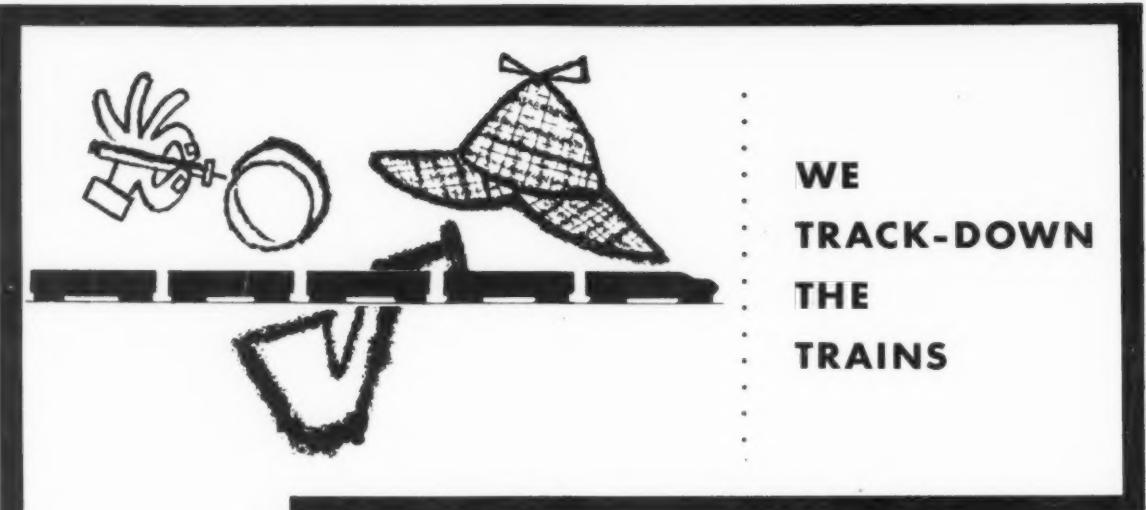
It remained for the U. S. Post Office Department to demonstrate that sizable cargoes of mail could be flown on a regular schedule. Air mail service between New York and Washington, D. C., began in May, 1918, and gradually was extended to other major cities. Coast-to-coast service, with flights operating both day and night, was inaugurated July 1, 1924.

Varney Was Pioneer

Passage of the Kelly Bill in 1925 authorized the Post Office Department to transfer air mail operations to private companies on the basis of competitive bids. Among those who took advantage of this opportunity was Walter T. Varney, a California aviation pioneer. He owned a flying school at Oakland and provided air express service on a triangular route, linking San Francisco, Modesto and Stockton.

Varney successfully bid on Route 5—a 435-mile airway between Pasco, Wash., and Elko, Nev., via Boise. He bought six Swallow biplanes and, on April 6, 1926, became the first of the private contractors to fly a scheduled trip. More than a dozen airlines began operations in the next two years, among them National Air Transport, Pacific Air Transport and Boeing Air Transport.

(Continued on Page 39)



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THE
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New Military Packing Specification For Wood Crates is Announced

A revision of Military Specification JAN-P-132 covering "Crates, Open, Wood; Maximum Capacity 2500 Pounds" has been prepared by the Packaging Development Branch, Engineer Research and Development Laboratories, Fort Belvoir, Virginia. This revision has been coordinated with the other Military services and is currently being printed for distribution. It will be designated as Military Specification MIL-C-132A.

No major design changes have been made in the revised specification. The purpose of the revision has been to clarify various points which have arisen during use of the original specification, to improve the figures, and provide detailed nailing patterns and requirements.

Dispenser Handle Volume (Continued from Page 15)

does the whole job of packing and sealing, as needed.

Mr. Atsaves pointed out that each post is figured as weighing about seven pounds, so that cartons of relatively small size but considerable weight to bulk constitute the standard shipping package. He finds that the reinforced gummed tape is an excellent closure. Damaged cartons reported in shipping are few. Higher cost of the tape has been offset by savings in labor and shipping losses.

Equipment used in Prentice-Hall Varick St. shipping center: reinforced gummed tape dispensers: Better Packages, Inc.; reinforced gummed tape: Atlantic Gummed Paper Corp.; corrugated containers: Union Bag & Paper Corp.; metered mailing machine: Pitney-Bowes, Inc.



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Rates * Tariffs * Commodities

• EFFECTIVE MAY 16, C-54 CARGO CHARTER rates of **Northwest Orient Airlines** will be \$1.75 a mile in either U. S. or Canadian dollars. The cargo plane ferry charge per mile will be \$1.27.

• SPECIFIC COMMODITY-RATE TARIFFS of **Air France** will include the following, effective on dates shown: **Essential oils, natural or artificial**, from Bangalore to New York, \$2.15 per kg., minimum 100 kgs.; May 1. * **Gramophone records and recording tape**, between New York/Boston and Beirut, \$1.75 per kg., minimum 45 kgs.; April 10. * **Cloth (bolt or cut to shape)**, from Bombay to New York, \$2.58 per kg., minimum 45 kgs.; April 19.

• THE SUMMER CARGO MEMORANDUM TARIFF has just been issued by **SABENA Belgian World Airlines**. It covers such matters as cargo-shipping procedures and documentation in New York and other U. S. cities, special handling between New York airports, loading specifications, general and specific-commodity rates and charges, etc.

• ULTIMATELY DEVELOPMENT OF AIR-FREIGHT transportation will require lower rates, stockholders of **Emery Air Freight Corporation** were told by President John C. Emery. "But today," he said, "increased capacity and dependability appear more important to us than reduced rates." He discussed the recently proposed 'deferred' air freight service at lower rates, commenting that "with Emery service based on speed, dependability and predictability, we do not intend to use this so-called deferred service, nor do we expect to be affected by it in any way."

• REVISIONS IN THE CARGO RULES tariff of the **Scandinavian Airlines System** will include the following: For **pickup and delivery service** bet-

PAYOUT & *The Air Shipper* is published twice a month - once as a section of **Shipping Management** and again as a separate newsletter from SM. Lucien Zacharoff, Editor and General Manager. Address news and editorial communications intended for *Payout* to G.P.O. Box 775, Brooklyn 1, N.Y.; telephone ULster 5-2243. All other business communications should be sent to **Shipping Management** magazine, 425 Fourth Ave., New York 16, N.Y.; telephone MURray Hill 3-6280-1.

HOW AIRLINE PACKS ITS OWN



↑ THIS DISPLAY OF DIE-CUT PRE-FABRICATED shipping containers and laminated fiberboard containers was staged by **Trans World Airlines** at a recent meeting of the Air Transport Association shipping sub-committee in Kansas City. During the past two years TWA has developed such containers to handle its own aircraft parts, which must be shipped between its overhaul base and stations around the globe. Many of them are designed with foam cushion and rubberized hog-hair lining to provide protection. All have been reduced in weight, some of them effecting as much as a 50% cut in weight over previously prevailing packing methods.

ween the boroughs of Manhattan, Bronx, Brooklyn or Queens and N.Y. International Airport - the rate per 100 lbs. will be 55¢, with minimum charge of \$1.25.

• ABOUT 60 SALES EXECUTIVES from the scheduled airlines of the U.S. met in Minneapolis-St. Paul last week at the Air Traffic Conference of America. The Conference is a division of the Air Transport Association and meets twice a year.

Rates • Tariffs • Commodities

• **WALKIE-TALKIE RADIO FOR GREATER EFFICIENCY** in handling air freight on the ground has been introduced by **United Air Lines** at Chicago's Midway Airport. A sending-receiving console is located in the freight office, approximately 200 yards from the ramp where UAL freighters are loaded and unloaded. The ramp supervisor carries an eight-pound Minipak radio for two-way communication with the freight office. This portable apparatus is expected to improve utilization of cargo-plane space. The handling of last-minute acceptances, for example, is expedited and weight-change information can be swiftly disseminated.

(THE RADIO INSTALLATION WAS MADE by Illinois Bell Telephone Co. for use on a rental basis. It is part of a hookup which links gate positions with UAL's ramp coordinator and chief of mechanical maintenance. The system operates on 42.98 mc.. Very High Frequency, and has a range of about one mile.)

• **SHIPPERS CAN SAVE A LOT OF HEADACHES** by making use of a cargo reservations plan set up by **Pan American World Airways** and similar to its passenger reservation system. With a reservation, cargo - be it a house or a horse - goes through on schedule. If it's a new product or model being introduced, this assurance permits planning for its unveiling at the destination. Without a reservation, cargo may pile up in a backlog. This means shipments awaiting space. While the backlog is cleared out as rapidly as possible, it causes some delay.

IT'S EASY TO MAKE A CARGO RESERVATION, we are informed by PAA's Latin American Division. If there is a PanAm office in the shipper's home city, he merely telephones. From other points, he has his shipping department wire the gateway city and give the cubic content and weight of the shipment, its destination, how it is traveling, and when it will arrive. Gateway cities to South American destinations: Miami, New Orleans, Houston, Brownsville, Los Angeles, San Francisco.

• **A TWICE-A-DAY TRUCKING SERVICE** to and from New York International Airport has just been inaugurated by **Swissair**. At the same time, the company opened a new freight terminal, offering larger, better and more modern facilities, at 4 Renwick St., New York 14, N.Y.

• **DAILY VICKERS VISCOUNT SERVICE** between New York and Bermuda was started last week by the

British Overseas Airways Corp. These turbo-propeller aircraft replaced the Super Constellations previously used on this route.

BOAC HAS BEEN APPOINTED general sales agent in the U. S. for **Trans-Australia Airline**. This arrangement does not include California, Oregon, Washington, or Hawaii, as in those areas TAA is represented by **Qantas Empire Airways**.

• **BARGAIN-AIR FREIGHT IS THE NAME** of a new service begun on Sunday (May 6) by **Trans World Airlines**. Faster than surface transportation but at rates which are no higher, the service is offered on TWA routes between New York and San Francisco, New York and Los Angeles, and Philadelphia and Los Angeles. It provides for delivery of freight on the fourth morning after its receipt at origin. The new rate will afford shippers savings of 35% under the normal Civil Aeronautics Board minimum rates on westbound shipments, and 45% on eastbound. A single rate for all commodities will be applied, and the minimum weight will be 100 lbs. TWA expects to attract a great deal of the business now moving by surface, according to Director of Cargo Sales S. E. Russ, because Bargain-Air Freight offers shippers important savings in time and money on non-perishable goods.

• **A BI-WEEKLY SERVICE IS BEING PLANNED** between the Union of South Africa and Australia by **South African Airways** which intends to coordinate its operations with those of Australia's **Qantas Empire Airways**. The latter already has a similar service, flying on alternate weeks. The same routes would be used by both carriers between the two countries, with intermediate stops at Mauritius and Cocos Islands. SAA expects to begin service in the next few months, with Constellations which will later be replaced by DC-7Bs.

• **A NEW SERVICE IS TO BEGIN THIS MONTH** between Rome and Johannesburg, to be operated by the Italian airline **Alitalia**. Intermediate stops will be made at Athens, Khartoum, and Nairobi. DC-6Bs will be flown on this run. The initial schedule calls for one flight a week; it is understood that under the terms of an informal agreement, flights may be stepped up to three a week.



• **ELECTED TO MEMBERSHIP** in the Air Transport Association of America: **The Flying Tiger Line**.

VARIETY ON LATEST MANIFESTS



A GUESS WHICH CARGO AIRLINE BROUGHT this fishing otter of India to N.Y. International Airport, consigned to the Trefflich Bird & Animal Co. When the Super Constellation freighter, dubbed the Flying Zoo by its crew, arrived at Idlewild from London, it had aboard one of the most exotic animal shipments in transportation history since the cruise of Noah's Ark. As airport officials, animal handlers, Bureau of Animal Husbandry, and assorted spectators watched, a stream of both wild and domesticated creatures disembarked. It included a Himalayan panda, two Indonesian orangutangs, a rare clouded leopard from Java, a tapir from Siam, five cages of Javanese temple birds, two cages of Malabar squirrels from India, 289 rhesus monkeys, 13 dogs (four French poodles, three pekingese, two dachshunds, two boxers, one beagle, one German shepherd), and a Siamese cat.

IN ADDITION TO THE 3,500 LBS. OF ANIMALS, the S&WA freighter carried cargoes of toys, clocks, precision instruments, photographic equipment, shoes, jewelry, sun glasses, tools, novelties, antique porcelain, textiles, hair brushes, locks, watchbands, and medical supplies from countries in Western Europe.

(THE DOGS AND THE CAT WERE PETS of servicemen and civilians returning from Europe. The wild animals were part of a great collection acquired recently in the Far East by the importing Trefflich firm. The bulk of the collection, which has included poisonous snakes, baby elephants, and so on, has been arriving in the U. S. via S&WA cargo flights.)

...and items for a future one

• SOON TO BE FLOWN TO EUROPE by Swissair, there is an exhibit in the window of the airline's Rockefeller Plaza window in New York. The display features three shrunken human heads, a quiver of poison-tipped arrows, and a collection of necklaces, wooden daggers, costumes and other items from primitive South American tribes. The objects are part of a much bigger collection

AGREE ON NONSKED FLYING IN EUROPE



• A MULTILATERAL AGREEMENT ON COMMERCIAL RIGHTS for non-scheduled air services in Europe was opened last week for signature at the European and African Office of the International Civil Aviation Organization in Paris. The main purpose of the new agreement is to insure the freedom of operation of certain categories of commercial flights - the flight of aircraft engaged in humanitarian or emergency missions; the transport of passengers by air taxi; small aircraft with seating capacity for not more than six passengers; charter flights where there is no resale of space; isolated flights with frequencies of not more than once a month; freight and passenger transport operations between regions which have no reasonably direct connection by scheduled air services. Freedom of operation primarily means either the removal of any requirements for prior permission for the flight or the simplification of any procedure necessary to obtain such permission.

THE AGREEMENT WAS PREPARED by the European Civil Aviation Conference during its session in Strasbourg last November and December and was completed recently in Paris with representatives of Belgium, Denmark, France, Germany, Greece, Netherlands, Norway, Sweden, Switzerland, and Turkey participating. Last week, on the first day the agreement was open for signature, it was signed by representatives of Belgium, Luxembourg, France, and Switzerland.

Parcels & Letters

• PARCELS CONTAINING HONEY BEES will not be accepted in the mails to Canada unless they are addressed to places served by railway post offices. Mailers of honey bees must inform themselves as to whether the addressees are at places to which such shipments may be sent. This information is obtainable from the Canadian postmaster at the office of address. The mailer must mark the wra per of his parcel 'Office of address served by R.P.O.' Parcels with honey bees for Canada are not acceptable unless they bear such endorsement. Queen bees, however, are not subject to the above-noted ruling.

acquired by a Swiss expedition. The leader of the group, H. M. Berney, came to New York to arrange shipment by transatlantic air freight. Because of the nature of the display, the window at 10 West 40th St. has been specially sealed.

People & Places

• 'AIR VAN TO EUROPE' WAS THE SUBJECT of **Daniel C. Minnick**, Seaboard & Western Airlines' expert on air shipping of furniture and household goods overseas, when he addressed a group of traffic managers in New York last week. His talk was illustrated with a 20-minute film depicting the movement of an entire household from a New York City suburb to Brussels, Belgium.

• A TWIN CITIES DISTRICT SALES OFFICE and ticket office will be opened about June 1 by **American Airlines**, on the 16th floor of the Northwest Bank Building, 620 Marquette Ave., Minneapolis. **Gerald T. Bradley** has been named district sales manager in charge of the new territory, which includes all of Minnesota, North and South Dakota, and parts of Wisconsin and of Montana.

• APPOINTED MID-WESTERN DISTRICT SALES promotion manager, based in Chicago:

• NAMED MID-WESTERN DISTRICT SALES promotion manager for **Air France**: **John A. Connolly** - to be based in Chicago.

• APPOINTED BY THE MINISTRY OF TRANSPORT and Civil Aviation as Chief Executive of **British European Airways**: **A. H. Milward**.

• AWARDED A HIGH BRAZILIAN HONOR, the Order of Vera Cruz: **Mario Martinez**, traffic and sales manager, Latin American Division, Pan American World Airways.

Financial Intelligence

• FIRST 1956 QUARTER NET SALES OF \$19,621,602 have been reported by **Temco Aircraft Corporation**, representing a 19% gain over the sales in the same 1955 quarter. Net income after provision for federal taxes in the 1956 quarter was \$644,847, about 10% higher than in the corresponding 1955 period. Comparative per-share earnings: 1956 - 38¢, 1955 - 35¢.

• NET OPERATING PROFIT OF \$362,500 during the quarter ending March 31, 1956, after taxes and before capital gains or losses, a gain of 230% over the comparable 1955 figure, has been announced by **Braniff International Airways**. Net income to surplus was \$361,000, an increase over 1955's first-quarter figure of \$155,900 which included \$46,100 of net capital gains.

• SALES AND EARNINGS IN THE FIRST 1956 quarter at **Lockheed Aircraft Corporation** were about the same as in the first 1955 quarter, while backlog expanded to \$1,277,397,000. Sales through March 25 totaled \$187,657,000, 1.4% below 1955's first quarter. Earnings, affected in the period by heavy investments in new transport development, were \$4,413,000 (\$1.56 a share), about 4% under 1955's figure. Commercial backlog totaled \$432,225,000, 34% of all unfilled orders; it's the highest in dollar value and percentage of total since World War II.

Equipment Trends

• SINCE DISCLOSURE OF ITS DETAILS IN PAYLOAD No. 230, a new Leviathan of the skies, the C-133A turboprop military cargo transport has taken to the air. It was test-flown, for the first time, from Douglas Aircraft Co.'s Long Beach Division to Edwards Air Force Base, also in California. Developed for the Military Air Transport Service, the huge freighter can haul greater payloads on longer flights than any other aircraft now in production. Capable of a 50,000-lb. payload over 3,500 nautical miles or of a 50-ton cargo for distances up to 1,000 miles, the transport can fly nonstop from Los Angeles to New York with the ton-knot equivalent of 22 loaded freight cars.

Traffic Statistics

• CARGO TRAFFIC THROUGH LEADING AIRPORTS in March (in lbs.) — Four New York region airports (**La Guardia**, N.Y., **International**, Newark, **Teterboro**): scheduled domestic freight - 16,839,900, express - 3,892,900, air mail - 4,666,000, first-class mail - 1,949-300; scheduled overseas freight - 4,117,500, mail - 1,698,900; non-scheduled freight - 542,700; helicopter freight and express - 338,200, mail - 128,100 (helicopter figures cover February operations). * **Seattle-Tacoma International Airport**: freight - 2-407,949, express - 230,498, air mail - 1,582,396, first-class mail - 176,781.

• WITH 3,726,000 COMMERCIAL FREIGHT TON-MILES it logged during the first quarter of 1956, **Seaboard & Western Airlines** showed a 73% gain in traffic over the same 1955 period. Since it started operations in May, 1947, S&W transports have made 7,464 ocean crossings (to the end of the first 1956 quarter).

• FOR THE FOURTH STRAIGHT YEAR, CHICAGO was the nation's busiest airport in 1955. The top 10 airports on the basis of aircraft movements (not including civil and military itinerant operations or purely local operations) were, according to the Civil Aeronautics Administration: Chicago (Midway) - 381-737, Miami - 276,729, New York (La Guardia) - 266-058, Los Angeles - 263,516, Atlanta - 246,709, Denver - 239,861, Charleston, S.C. - 229,557, Cleveland - 226,768, Washington - 225,914, Teterboro - 221,637.

• THE HIGHEST VOLUME OF TRAFFIC for any first quarter in **United Air Lines** history has resulted in net earnings, after taxes, of \$368,859 in 1956. This was equivalent to 12¢ a share of common stock based on average shares outstanding during the period. In the same 1955 period, the company earned \$465,801, equal to 9¢ a share, after preferred dividends. All outstanding preferred stock was called late in 1955.

• UAL TOTAL REVENUES FOR THE 1956 first quarter were \$57,006,260, up 13% as compared with the same-period 1955 revenues. Freight revenues were \$2,142,861, up 7%, express \$1,108,172, up 8%, mail \$2,361,328, up 7%, passenger revenues \$50,748,341, up 13%.

• TOTAL OPERATING REVENUES REPORTED for 1955 by **Pan American World Airways** were \$238,059,000 and net operating income \$12,679,000. Operating revenues from freight were \$22,754,000 and from passengers \$179-728,000. Reported net income was \$10,200,000, equal to \$1.66 a share (\$10,400,000 and \$1.69, respectively, in 1954).

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Traffic Tower

METROPOLITAN TRAFFIC ASSOCIATION of N. Y., after a successful annual dinner April 26, will devote its May 10 meeting at the Commodore Hotel to problems of shippers. Frank Malloy and Vincent Scarpinito will conduct the traffic forum.

AUTOMOBILE MANUFACTURERS ASSOCIATION'S Traffic Committee has elected C. A. Lawrence, general TM of American Motors Corp., as chairman. He succeeds the late N. J. Brennan.

E. L. BRUCE CO. has promoted Etheridge S. Shane to the post of TM. A veteran of 21 years in the Bruce traffic department, Shane formerly was assistant TM.

OHIO VALLEY TRANSPORTATION ADVISORY BOARD has announced the election of William L. Fogleton as general chairman. Other officers are: Dana B. Gee, alternate general chairman; L. H. Sickman, general secretary; John E. Vetter and Robert E. Keith, executive chairman and vice chairman, respectively.

P. H. HANES KNITTING COMPANY has announced the promotion of T. Harold Daniel to the position of TM. He has been with the company since 1940.

CROWN ZELLERBACH announced the retirement on March 31 of Martin W. Levy as Traffic Manager. He had been with the company for 45 years.

TRAFFIC MANAGERS INSTITUTE has awarded three scholarships in the total value of \$480 to the Delta Nu Alpha Chapters in the eastern region. The grants were made on the basis of an essay contest on: "Why Did I Choose Transportation as My Career?"

TRAFFIC CLUB OF NEW YORK was addressed by Secretary of Commerce Sinclair Weeks of its 46th annual dinner February 16. More than 2,000 people attended. Edmund A. O'Brien presided and H. H. Meyer was chairman of the arrangements committee.

MICHIGAN INDUSTRIAL TRAFFIC LEAGUE in cooperation with 18 local traffic and transportation organizations and the College of Business, and Public Service, Michigan

Always getting through!



Let B&O "baby" your LCL

Difficulties of "getting through" present few problems with B&O Time-Saver Service. You can count on unusually dependable delivery day in and day out. And B&O "babies" your LCL with utmost care . . . on fast, convenient schedules. That's why you're smart to ship via B&O Time-Saver.

Ask our man!



Baltimore & Ohio Railroad

Those who know—use the B&O!

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Size or Weight are no problem,
they are easily handled when you...

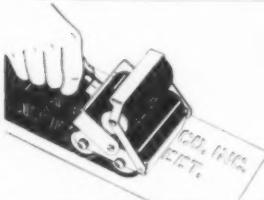
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THE FASTER DIRECT ROUTE TO EUROPE AND
THE MIDDLE EAST. ALL CARGO FLIGHT,
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- Use for stenciling rough or uneven surfaces - crate wood, burlap, cloth, concrete, etc. and all general purpose stenciling.
- Sturdy, all brass machined parts.

THE ★ STAR MARKER ★
TRADE MARK



An indispensable felt tip fountain marker for all purpose marking on any surface.

Use for:

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- ★ marking on metal, glass, plastics, etc.

Write today for complete catalog and literature on these time tested products.

THE **NEW**
PATENT PENDING

ROLL-A-STENCIL
UNIVERSAL

NOW YOU CAN HAVE THE PERFECT
COMBINATION OF LARGE EASY TO
READ STENCIL MARKING AND LIGHT-
NING-FAST APPLICATION DIRECTLY
TO SHIPPING CONTAINER!

DESIGNED for faster stenciling on corrugated cartons, smooth wood boxes and all other smooth porous surfaces



• **TWIN ROLLERS**
smoothly roll on perfect impressions in one rapid stroke **3 TIMES FASTER** than brushing or spraying

• **ADVANCED DESIGN**
with self contained ink roller holds enough ink to stencil 500 to 1000 impressions on one inking

• **LIGHT-WEIGHT**
Convenient to carry around.

• **"ROLL-A-STENCIL" INK** now available in colors.

Shipping departments welcome this completely new and faster method. Order your set today on a money back guarantee. Set shown includes pint can of black ink and pouring spout. **\$10.50 plus postage**

UNIVERSAL FOUNTAIN BRUSH CO., St. Petersburg, Florida

... for more details check #14 on HELP-O-GRAM card.

State University, will sponsor the third annual Michigan Traffic and Transportation Conference May 9-12 at the University. Innovations in transportation will be outlined by T. F. Robertson, managing director, Common Carriers Irregular Route Conference, American Trucking Association; W. W. Brown, president, Monon Railriad; and John C. Emery, president, Emery Air Freight Corporation, "Correlation of Traffic with Other Management Functions" and "Distribution and Warehousing" are other subjects to be explored.

WOMEN'S TRAFFIC CLUB of N. R. heard a talk by Walter H. Jones, public relations director for United States Lines at its April dinner meeting.

SOUTHEAST TRAFFIC CLUB OF LOS ANGELES elected the following new officers recently: President, Floyd C. Morrow; Vice Presidents, Paul Millican and Dick Herder; secretary, Harold Newcomb; and treasurer, Ray Parada.

WOMEN'S TRAFFIC CLUB OF SAN FRANCISCO recently elected Anita Maguire of Pacific Southwest Freight Bureau as president to succeed Frances Rutherford. Others elected to office were: Muriel Collins, vice president; Virginia Colombo, secretary and Alexandra Harrington, treasurer.

WORCESTER TRAFFIC ASSOCIATION announced the recent decease of two of its past presidents, John J. Mullan and Edward F. Kennedy.

HYSTER COMPANY has promoted Theodore H. Sheafe to the post of TM, it was announced by Eugene Caldwell, Vice president and general manager. Sheafe joined the Hyster Traffic Department in 1945. He succeeds the late T. B. Dynes.

WARNER & SWASEY COMPANY reported the retirement of T. P. Woodworth as TM after 39 years' service with the firm. He was succeeded by Frank Day.

E. FRANK EARDLEY, director of the traffic information bureau of Pacific Intermountain Express Company, passed away in Oakland, Calif., on April 20. He was 62. He joined P-I-E in 1937 as TM, and three years later became director of traffic for the company.



LISTEN, MR. T. M.

M-H And Packing Specs

ONE OF THE MAJOR problems confronting shippers and receivers with the inception of materials handling equipment was the standardization of both equipment and packaging methods so that interchange and transfer could be accomplished easily.

For example, if a manufacturer of materials went into palletized loads as an economy measure, it was and is quite convenient for him to control the flow of his material throughout the plant and onto trucks in a palletized unit providing he used the proper equipment such as fork lift trucks, etc. However, in many instances, the saving afforded to the manufacturer and shipper was offset by the difficulty the carrier had in moving the material if he did not have a similar equipment. By the material was also inconvenienced if he too did not have the proper equipment for handling similar palletized units.

The problem is by no means settled and is somewhat of a thorn in the side of all receivers and shippers today. All of this has tended to create confusion on the part of manufacturers and receivers.

"Blueprint for Truckers"

There are so many idiosyncrasies in the material moves of various plants that it is practically impossible for any association to establish standard methods of handling material. Furthermore, a concern which handles two or more types of material oftentimes has to go into two different types of material handling equipment. A re-

ceiver of material may get in packaged units in six or eight different types of pallet units.

Part of the problem, unloading of trucks, must not be neglected. Often, a manufacturer with the proper equipment can load a full trailer load of material on pallets, double-tiered, in a truck. However, the receiver of this material, without the proper equipment finds that it is next to impossible to get the material from the truck. In our own operations we have several times, had to send the trailer to a rigger and have him partially unload before our equipment could handle the material. Because this became such a problem, we devised what we call a "Blueprint for truckers" system of specifications for our suppliers so that this problem would not be encountered. It has worked out so well with us that we feel that other concerns

might incorporate it in their purchase order specifications.

Suppliers Cooperate

Here is how it works for us. Initially, we consult the supplier of our materials and ultimately we agree on a standard size pallet on material being shipped to us. Furthermore we specify the size of the carton and the number of cartons per pallet load. We also specify whether this material can or cannot be double-tiered in the truck. By doing this we have now agreed upon a common unit load container for merchandise coming from the supplier to us. Furthermore this specification normally would allow us to unload the trailer with little or no effort.

However, we often encounter transfers by the truckers which upset the normal trailer load pattern and therefore render our

(Continued on Page 35)

Rutgers University Students Visit Terminal to See Trucking Operations

Motor Traffic Class on Tour.



The Motor Traffic Management class of the Rutgers University Extension Division in Newark, spent one of its regular sessions last month by visiting Bilkay's Motor Terminal in Newark. George Olsen, the instructor in Motor Traffic Management at the University, was in charge of the group.

Bill Lamberti of Bilkay explained in detail the operation of the terminal. He pointed out the operations of the terminal platform and explained the dispatching, routing of trucks and billing operations. After the tour of the facilities there were talks by members of Bilkay's staff in further detail. A question and answer period followed.



TUNING IN



Wooden Box Ass'n Elects Bronson Pres., Names Luddy to Direct Container Projects

J. D. Bronson, president, Cascade Lumber Company, Yakima, Wash., was elected president of the National Wooden Box Association during the group's annual meeting held February 6-7 in Houston, Texas. Mr. Bronson succeeds L. J. Chaffee.



Thomas J. Luddy

John M. Nelson, III, was elected to a vice presidency of the organization. Other officers were re-elected as follows: Thomas Munroe and Arthur Temple, Jr., vice-presidents; C. D. Hudson, Washington, D. C., executive vice-president; H. R. Hudson, secretary; and P. John Galbraith, treasurer.

Under plans for expansion of market development activities, the Association subsequently announced the addition to its staff of Thomas J. Luddy, for the last three and one-half years a packing and packaging technologist with the Bureau of Ships, U. S. Navy Department. Mr. Luddy will not only handle specific container projects under the association's market expansion program, but will give assistance to users of shipping containers in solving shipping and materials handling problems.

SIPMHE Names Committee For 1956 Exposition

A permanent show committee under the chairmanship of R. C. Cragg of the Gould-National Batteries Corp., Chicago, has been named to supervise rules and policies for SIPMHE's annual National Protective Packaging and Materials Handling Exposition. The show will be held this

year in Kiel Auditorium, St. Louis, Oct. 23-25.

The committee will have jurisdiction over show hours, exhibit rules, the relation of the exposition to the society, exhibitors' welfare, admission regulations, maintenance of a high level of registrants and kindred matters. Besides Cragg as chairman, the committee consists of J. G. Green, Hooper-Green Co.; W. B. Lincoln, Jr., Inland Container Corp.; R. A. Ornberg, General Box Co.; Bernard M. Kewin, Automatic Transportation Co.; C. H. Carlson, Signode Steel Strapping Co.; R. M. Snodell, Acme Steel Co.; L. S. Beale, Wirebound Box Manufacturers Association; and M. C. Weisenhorn, Jiffy Manufacturing Co.

Management Society to Hold Conference On Mechanized M-H May 17-18

The First National Material Handling Conference of the Society for Advancement of Management will be held on May 17-18 at the Hotel Statler, New York. Programmed to provide practical, cost-conscious discussion of all phases of material handling, the Conference will set the goals for achieving mechanized and automatic material handling for executives and engineers.

Among the many authorities who will address the Conference are: G. E. McNeive, Manager of

(Continued on Page 41)

NY SIPMHE Holds M-H Forum



The subject of general warehousing was discussed by Joseph P. Akrep of the U. S. Naval Supply Research & Development Facility, Bayonne, N. J., at the April meeting of the N. Y. SIPMHE Chapter. Other speakers and their topics were left to right: John D. Waite, Zonite Div., Chemway Corp., on materials handling costs; Elmer J. Perruzzi, E. R. Squibb & Sons, on selling materials handling; Howard W. J. Baines of Squibb on containers and container designs; and James Schureman, Mengel Co., on test equipment.

..... NEWS-

..... PROMOTIONS

of companies and associations

AMERICAN AIRLINES has elected **Manly Fleischman** to membership on the board of directors. An attorney, Mr. Fleischman has served in top spots with various government agencies since 1941.



Manly Fleischman

ARABOL MFG. CO. opened a new warehouse in Tampa, Fla., for storage of its industrial adhesives. Simultaneously, President **William A. Weaver** announced the purchase of formulas for manufacture of resin emulsion adhesives from Dewey & Almy Chemical Co., division of W. R. Graffee & Co.

ORCHARD PAPER COMPANY has scheduled its next sales clinic for May 18 and 19 at its St. Louis plant. The clinics will be held monthly for the rest of 1956 at both the St. Louis and Potsdam, N. Y. plants. Company President **Robert Orchard** and Merchandising Manager **Keith Campbell** will speak. The promotion of Campbell to the post of secretary was also announced.

PAISLEY PRODUCTS, INC. has acquired Woerz Paste and Gum Co. of Los Angeles, it was reported by Paisley executive vice president **Murray Stempel**. **Ralph C. Woerz**, former owner-manager, will serve as general manager of the Los Angeles Paisley division.

THE GUMMED INDUSTRIES ASSOCIATION was represented at Federal Trade Commission hearings in Washington on March 26 by **Philip O. Deitsch**, GIA Managing Director. He urged FCC to establish a Trade Practice Rules Committee represent-

ing the gummed paper and sealing tape industry in order to achieve "self-regulation" of the industry.

COUNCIL OF SAFETY SUPERVISORS, American Trucking Associations, will hold its 17th annual Spring meeting, May 15-18 at the Sheraton Hotel, Chicago. ATA President **C. J. Williams** will be one of the speakers.

HUDSON PULP & PAPER CORP. has announced the promotion of **John Courtney** to the post of Cincinnati district manager. Previously, he was packaging specialist for the Industrial Products Division for two years.

BETTER PACKAGES, INC. was represented by display booths at both the A. M. A. National Packaging Exposition in Atlantic City, and the N. P. T. A. Show at the Waldorf-Astoria Hotel, New York, last month. **Mills W. Waggoner**, general sales manager, and **Leslie E. James**, merchandising manager, appeared at both shows.

GILMAN PAPER COMPANY has added a new paper machine at its year-old kraft mill in St. Marys, Ga., for the production of bleached sulphate linerboard.

KRAFT BAG CORPORATION has appointed **Ed Burgers, Jr.** as sales promotion manager with headquarters at the New York office.

PITNEY-BOWES, INC. reported that its sales of postage meters and business machines increased 12 percent and its profits rose 21 percent last year over the 1954 levels. President **Walter H. Wheeler, Jr.** also disclosed that metered mail now amounts to nearly half of all U. S. mail.

NEW ENGLAND SHIPPERS ADVISORY BOARD re-elected **William H. Day** general chairman. Others re-named were: **R. L. Travis**, general secretary; **F. J. Gill**, **L. F. Van Kleeck**, **A. B. Moore**, **E. W. Mayer**, **W. E. Fox**, **J. M. Stuart**, and **W. E. Malone**, vice chairmen.

WATERPROOF PAPER MANUFACTURERS ASSOCIATION has accepted the resignation of **Philip O. Deitsch** as Administrative Officer. He had held the post since founding of the association 15 years ago.

ACME STEEL COMPANY plans to expand its plant at Riverdale, Ill., and to construct new plants at Burnham and Calumet City, Ill., it was disclosed in the company's annual report.

CLARK EQUIPMENT COMPANY started West Coast operations May 1 in a 40,000 square-foot structure at Richmond, Calif.

SPECIFICATION PACKAGING ENGINEERING CORPORATION has appointed **Mrs. Olive Salembier** executive vice president. Formerly, she was controller. **Chaplin E. Collins** was promoted from assistant secretary to secretary.



Mrs. Olive Salembier

ATLAS PLYWOOD CORPORATION has appointed **E. Leslie Priestman** director of industrial engineering, it was announced by **Robert A. Muller, President**. This is a new position in line with the company's plan of reorganization and expansion.

ASSOCIATION OF AMERICAN RAILROADS stated that Class D roads in the first two months of 1956 installed 244 new locomotive units, all diesel-electric, as compared with (Continued on Page 33)

NEW PRODUCTS IDEAS SERVICES

→ FOR MAY, 1956

Carton Staplers

Low-cost foot power carton staplers for the small plant and for use in an auxiliary capacity in bigger plants, have been introduced by Fastener Corporation.



The new model is designed for easy portability. It weighs only 38 pounds. Post models for stapling bottoms of cartons and straight arm models for stapling telescopic type cartons and corrugated fillers are available. They work through manual control or air operation.

(Check #59 on card facing Page 8)

Mailing Bags

A new line of mailing, parts and storage bags featuring innovations in bag and tag materials and design was recently made available to the shipping-packing industry.

The manufacturer, Hutchinson Bag Corporation, offers a complete line of 5 basic bag types in a wide range of sizes and large selection of materials including various grades of cambric cloth. In addition to basic drawstring and wire-tie parts bags, and a bag and envelope dual-mailer, the line includes 2 special-purpose bag and tag combinations. One, designed for outdoor parts storage, is a weather-resistant Sup-r-Bag with a unique "Magic-Mark" Tag stitched in the side. This tag is mildew, water, and insect-proof and keeps ordinary pencil marking legible even under abusive handling and shipping conditions. The Mail-a-Bag is a standard drawstring mailing bag

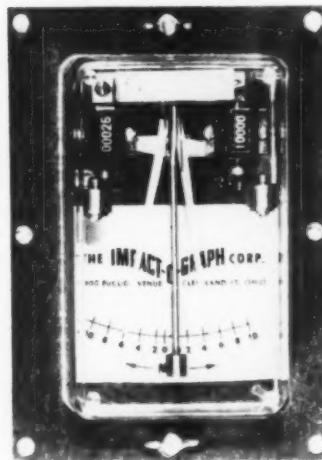
with a high tensile strength "Plasti-Tuff" Tag made of plastic impregnated fibers.

The company also provides bag design advisory service and modern facilities for layout, plate-making and printing bags and tags in as many as four colors. Literature picturing and describing the 5 basic bags with prices for each in a wide range of sizes is available on request.

(Check #60 on card facing Page 8)

Impact Recorded

Recording of the maximum shock to the freight car and the actual number of over-speed impacts from either direction is now possible with the Impact Register just introduced by Impact-O-Graph Corporation.



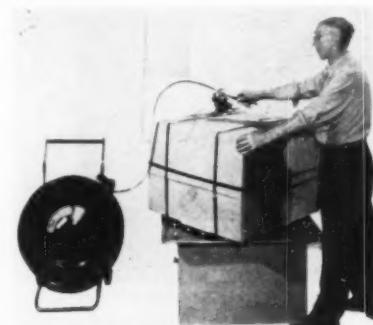
A previous model, the "Yard Recorder", originally made for the Pennsylvania Railroad, has been dressed up with the addition of specially calibrated counters which measure the over-speed impacts. This recorder, which is small and weighs only about two pounds, can be used also to study blocking and bracing methods.

(Check #61 on card facing Page 8)

Strapping Table Top

Rotation of heavy containers for packing or strapping can be made easier and safer by using a special

strapping table top which enables the operator to stand in one position, it was announced by Signode Steel Strapping Company, the manufacturer.



The table top contains 61 one-inch ball casters, extended $\frac{3}{4}$ " over the surface, which make it easy to move around heavy containers and avoid muscular strains. The mechanism can be mounted on a permanent or portable base or in conveyor lines. A metal strap guide can be used as optional equipment to facilitate feeding the strap.

(Check #62 on card facing Page 8)

Plastic Molds

Formed plastics and molds for industrial and military packaging are now being produced by Preservation Packaging, Inc.

The firm stated that intricate shapes of molds can be made to fit varied packaging problems. The mold conforms to the shape of the item and can be used for containers, cushions, protectors, assembly trays and inserts. PP also maintains a testing laboratory for military specification packages. Permanently dehumidified containers are used for packaging.

(Check #63 on card facing Page 8)

Tackers for Shipping

Three tackers and staplers for fastening tags and labels to shipping cases and cartons, lining containers with corrugated or waterproof paper and other purposes were announced recently by A. L. Hansen Mfg. Co.

Model T-3, an all-purpose tacker,

holds a strip of 140 tackpoints. The "take-up jaw" can be snapped open for instant inspection and cleaning. Model T-38 is a heavier unit and drives longer staples through the hardest wood and even through light metal. The third of the new tackers, Model T-4, is similar to the T-3 but has a slightly heavier gauge tack-point. Literature is available free.

(Check #64 on card facing Page 8)

New Bag Truck

A new magnesium hand truck for moving bags, sacks, and cartons has been announced by Magline Inc., manufacturers of magnesium materials handling equipment.

According to the company, the new bag truck is designed to stand upright, with or without a load. The truck tips forward slightly during loading, thereby lifting both wheels clear of the floor. While being loaded or unloaded, this feature prevents the truck from rolling, even on an inclined surface. Basic construction is magnesium throughout, with a nose plate of steel for added stability. All parts are easily replaceable, thus holding maintenance costs to a minimum.



To protect bags and sacks from being torn or damaged, the wheels are equipped with hub caps, and all bolthead are countersunk. Lifetime sealed wheel bearings are used for longer wear and easier wheeling. The truck weighs only 37 lbs., and is capacity-rated to carry 1,000 lbs.

(Check #65 on card facing Page 8)

Cargo Covers

Development of a new "test tube" material combining nylon and special plastic for use as tarpaulins and in covering cargo and equipment, has



EASIEST, MOST EFFICIENT METHOD EVER DEVISED FOR ADDRESSING SHIPMENTS

Imagine—no labels or tags to prepare and apply, no bulky stencil boards to cut, no expensive equipment to buy. It's so simple: A "label-frame" is preprinted on the cartons by the carton manufacturer. The ship-to address is imprinted on the cartons within the frames with

a small Weber handprinter and an inexpensive, paper stencil. Stencil is cut on a typewriter—separately or as by-product of your shipping paperwork. A clean, fast, systematic operation. Very inexpensive. (Handprinter costs just \$14.50.) Get all the details. Clip the coupon.

Weber

Weber Marking Systems
Division of Weber Addressing Machine Co.
Mount Prospect, Illinois

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NO MORE HOBO CARTONS WHEN YOU USE

COVERMARK



- INSTANTLY REMOVES UNWANTED MARKINGS FROM YOUR CARTONS, CRATES, DRUMS, ETC.
- CARTON COLORED - DRIES FAST TO A CARTON-LIKE SURFACE READY FOR RE-USE.
- WE'LL BE GLAD TO SEND YOU COMPLETE LITERATURE.

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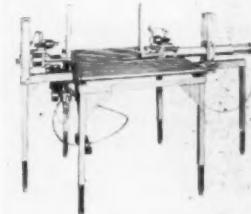
been announced by Herculite Protective Fabrics, Inc.

The manufacturer stated that "Herculite" as the material is called, is impossible to tear regardless of the amount of tension exerted. It is waterproof and fireproof and can't be affected by acids, grease, oil and salt water. The material is light in weight and can be put on and taken off by one man. Samples will be sent free.

(Check #66 on card facing Page 8)

Automatic Stapler

Carton closure costs can be reduced to less than one-half a cent for the average box through usage of the new automatic stapling machine, Model CSH-2, just produced by Container Stapling Corporation.



The danger of time loss due to electrical failure is eliminated by the absence of solenoids, relays, switches, wiring and fuses. Fully automatic lubrication is assured by a valving arrangement whereby nebulized oil is continuously exhausted over the moving parts, thus eliminating manual oiling.

(Check #67 on card facing Page 8)

New Literature

Four new catalogs on its matched packaging and gift wrapping papers, all profusely illustrated and in color, have been issued by Orchard Paper Company. For free copies,

(Check #68 on card facing Page 8)

"Gummed Tape Tips" is the title of a colorful pocket-size folder just published for distribution by Gilman Paper Company. This folder tells in three minutes' reading time how best to use and store gummed tape.

(Check #69 on card facing Page 8)

SIPMHE is offering a six-volume library on packaging and materials handling problems and solutions. The volumes contain talks, some illustrated, that have been given by outstanding experts at the annual short courses presented by SIPMHE from 1950 to 1955.

(Check #70 on card facing Page 8)

"Pallet Repair Manual" is the title of a new report published by the Office of Technical Services, U. S. Department of Commerce. Prepared

Solve Your Special Bag Problems with



Parts Bag
Basic drawstring bag. Quality at low cost. Storage of non-rag items - tying parts to machinery, etc.



Wire-Ty Bag
Same as basic parts bag, but with a wire-tie for fast and secure fastening of parts to machinery, etc.



Dual Mailer
Top quality drawstring bag with high quality kraft envelope stitched in at the bottom for enclosures.



Mail-a-Bag
Mailing bag with non-tear Plasti-Tuff Tag (plastic-impregnated fibers) for address, etc.



Sup-r-Bag
A fine tightly-woven bag with mildew-proof, insect-proof Special Magic-Mark Tag (always keeps markings legible).

HUBCO

Custom-Made

MAILING & STORAGE BAGS!

Special protection is now possible with Hubco's exclusive innovations in bag and tag materials. These include: (1) weather-resistant bags (2) durable Plasti-Tuff Tags of plastic-impregnated fibers (3) mildew, insect-proof Magic-Mark Tags - pencil marks legible under abusive conditions.

Parts hard to pack or mail are no problem to the experienced bag design specialists at Hubco. Their services are available at no extra charge. Just "tell us your troubles". We'll help solve them by designing tailor-made bags to fit your specific needs.

Putting "sales-punch" in packaging is another specialty. Our professional merchandising experts will plan your product packaging with promotion, sales-appeal and **profit** in mind... give you the "best-lookin' bags in the business"! Hubco has complete modern facilities for layout, plating and printing bags and tags in up to 4 colors.

Whatever Your Bag Problem...
turn it over to Prof. Herbie Hubco for a prompt, 100% satisfactory solution!

FREE sample bags, prices & sizes sent on request without cost or obligation. Write TODAY:

HUTCHINSON BAG CORP.

Hutchinson, Kansas



Professor Herbie Hubco, B.D.E.
"Bag Design Engineer"

... for more detail, check #10 on HELP-O-GRAM card.

by the Navy, the report includes information on the 48" x 72" stevedore pallet, the 48" x 48" and 40" x 48" pallet, both the block type and the four-stringer type. Methods of converting pallets to other than their original uses, are also covered.

(Check #41 on card facing Page 8)

Shipment addressing stencils that can be cut on modern office machines as part of order-invoice writing procedure are the subjects of two new bulletins available from Weber Marking Systems Division of Weber Addressing Machine Co., Inc. One bulletin describes the Weber Tob-Ca Stencil which can be cut as a by-product of the forms, and the other bulletin covers the Continu-matic stencil which is mounted in continuous form on a marginal punched carrier sheet, for cutting independently of forms.

(Check #42 on card facing Page 8)

News-Promotions

(Continued from Page 29)

a total of 221 in the same period last year. Some 897 new locomotive units were on order as of March 1.

CENTRAL STATES PAPER & BAG CO. has named P. A. Erickson vice president in charge of national accounts. He was formerly with American Can Co.

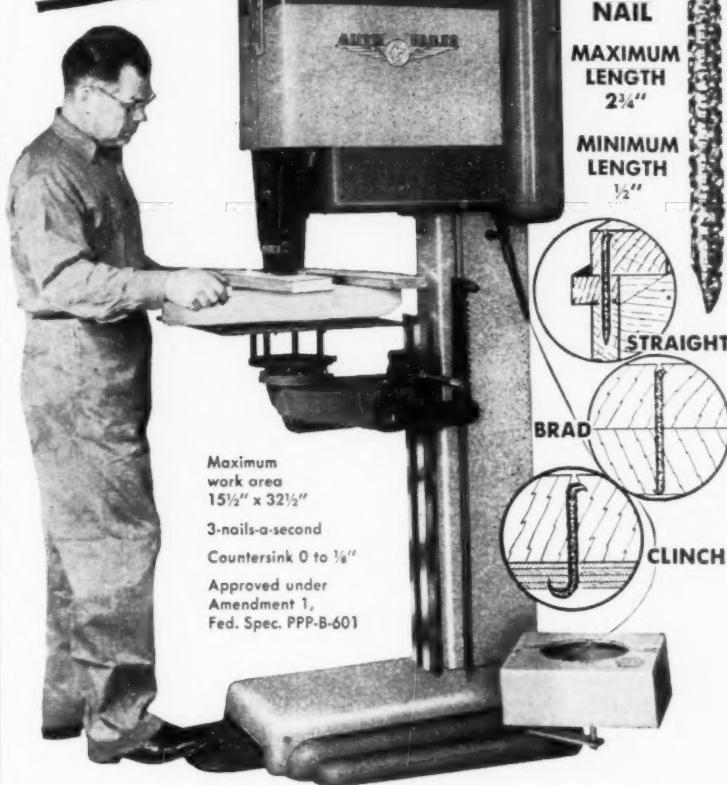


P. A. Erickson

AMERICAN TRUCKING ASSOCIATION reported that loss and damage claims paid by the trucking industry during 1955 decreased by five percent, accounting for a 20 percent fall in the last two years. ATA's Research Department also disclosed that intercity general freight truck volume in 1955 went up 13.7 percent over 1954. January, 1956 truckloadings increased 12.9 percent over Jan-

AUTO-NAILER'S HERCULES-9

NEW!



AUTO-NAILER
MADE IN U.S.A.

Write for details of new Hercules-9 and line of nailers to fit all needs

AUTO-NAILER COMPANY
267 MARIETTA STREET, N.W., ATLANTA 13, GEORGIA

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uary, 1955 and 3.4 percent over December, 1955.

FEDERAL BARGE LINES has appointed Matt C. Klein, as St. Louis general agent, it was announced by Peter Fanchi, Jr., general TM. Currently past president of the St. Louis Motor Carrier Club, Klein served as president of the Traffic and Transportation Club in 1954 and 1956.

ACME STEEL COMPANY has named Donald E. Black as sales training manager, it was announced by Vice President G. Findley Griffiths. He has been with the company since 1939.

AUTOMATIC TRANSPORTATION COMPANY has appointed Whitney S. Alger as regional application engineer for the South Central States. He will function as liaison between the Chicago factory and franchise representatives in Arkansas, Louisiana, Mississippi, Oklahoma and Texas.

STEEL SHIPPING CONTAINER INSTITUTE predicted that container output during 1956 may reach the highest point in 10 years with a total output exceeding 110 million units. President Livingston Keplinger reported that 1955 output exceeded the 100 million unit mark. This repre-

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brings you a...**



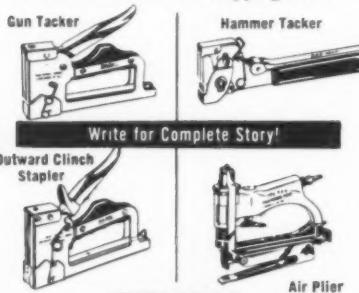
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This all-steel footpower stapler is a "must" for all shipping rooms, large or small. Easy foot pedal action drives and clinches Duo-Fast Staples in one operation. Cartons are securely stapled.

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Other Models for the Shipping Room



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sented a total shipping capacity of over two trillion gallons.

MENASHA WOODENWARE CORPORATION announced the incorporation of a new subsidiary, The Container Development Corp. The new business will market materials handling containers and will have its home base at Watertown, Wis.

MORNINGSTAR, NICOL, INC. elected J. B. Morningstar as vice president. Until recently, he was manager on the West Coast of the combined operations of Morningstar and Paisley Products, Inc., a subsidiary.



J. B. Morningstar

TRINER SCALE & MANUFACTURING COMPANY has announced the appointment of Edward R. Fox as vice president in charge of sales. His designation is part of an overall reorganization at Triner since control was acquired late last year by Theodore B. Jansey, who is now president. The company is planning new models of postal and industrial scales.

Packing A Punch

(Continued from Page 11)

the field . . . a valuable asset to the carrier. He performs specialized services, tailored to the needs of individual shippers, which the carrier cannot and should not attempt. Normally, in addition to assisting and advising the shipper, he acts as agent for the carrier.

"Some forwarders," Neth continued, "also act as indirect carriers, filing their own tariffs and issuing their own waybill to the shippers. Under these circumstances, their relationship to the carrier is that of a shipper and not an agent."

Neth explained that the rates of direct carriers in international air carriage, are agreed to by the International Air Transport Association

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membership, while indirect carriers, namely consolidators are not subject to IATA rate machinery. He expressed the hope that the proceeding presently before the Civil Aeronautics Board concerning the indirect carrier in international air freight "will bring forth results which will contemplate the participation of both direct and indirect carriers on an equitable basis in the spheres in which each is best suited."

Regarding the future of international air freight, Neth pointed out that American industry, as well as government, must recognize the value of the traffic management function in relation to top level planning. "We in air freight," he commented, "have an important stake in the elevation of the traffic management function to the top executive level. This vantage point is necessary in order for business management to evaluate properly all traffic considerations in relation to other management functions."

"LISTEN MR."

(Continued from Page 27)

equipment practically useless when it comes to unloading at our truck dock. Because of this, we had our engineering department provide us with blueprints for all material which we order in truckload quantities which show the method and the position pallets should be placed within the trailer so that we can unload them at our dock. Several copies of this blueprint are forwarded to the supplier of the material.

If the supplier loads his own trailer to us there is no problem if he follows the blueprint. However, if the material is given to a common carrier, the supplier is instructed to supply this common carrier with a set of blueprints for arrangement of material in the truck. The common carrier then has to follow these blueprints if there is a transfer or any other juggling of freight enroute.

I am sure that there is no legal requirement that a common carrier load freight in their trailer to our specifications. However, because the loads nor-

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Business needs traffic-trained men—executives skilled in the technique of traffic and transportation. The man who knows—who is able to answer questions on how to ship, on rates, tariffs, laws and regulations—business rewards liberally.

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by study of theory alone.

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mally occupy between three-quarters and the entire trailer, and because the carriers are extremely cooperative, we have found no difficulty in having them adhere to these specifications.

By so doing, it not only decreases our unloading time, but by the same token allows the carrier to deliver the load to us in probably half the time it would take if he had promiscuously placed material in his trailer.

We have even carried this blueprint idea one step further by providing our receiving department with drawings or blueprints for every item which we purchase in quantity showing the correct method of stacking the cartons on pallets and the proper means of storage. By following these instructions or specifications through, the manufacturer, the carrier, and the receiver of the material all are operating on a common method of handling.

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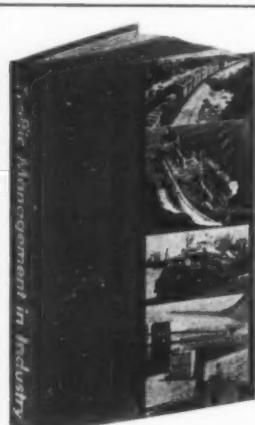
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"**N**OBODY in traffic, packing and shipping can complete a study of this book without enhancing his knowledge of this rich and complex field and getting a clear idea of how to set about solving its problems," writes "Shipping Management" of TRAFFIC MANAGEMENT IN INDUSTRY.

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Custom Designed Warehouse

(Continued from Page 17)

from receiving, through storage and warehousing, and into shipping. It eliminates a repacking operation in the warehouse, thus saving labor and time.

For mail order shipping a reverse program has been set up. Since Sperry & Hutchinson pays mailing costs big savings are realized by eliminating excess weight. Many of the packages are soft goods, and most are light weight, from two to ten pounds. Ample protection is provided through the use, wherever possible, of insulated shipping bags and double-wall kraft paper bags.

S & H's highly systematized method of warehouse control eliminates any problem of classification in storage. Arriving material may be stored wherever there is space, at discretion. A control card system makes possible instantaneous location of goods in the warehouse and eliminates any problem of mislaid material. Control cards show dates shipments were received, so that first received shipments automatically ship out first. For spot checking purposes cards attached to cartons in storage indicate by color what month materials were received. Thus, if an item is slow in moving out of the warehouse it will be readily noted and reported to the control center. Ordering of stock is closely controlled to avoid over-long storage of any type of goods.

In another recent control step Sperry & Hutchinson has made an effort to have suppliers furnish that percentage of an item required to meet mail order requests in individually packed units. This can cut down greatly in opening and repacking of goods for small shipments.

Wherever possible mechanization has been introduced to speed movement in the Chicago center. The ever-moving tow-conveyor line keys the system, but supporting and abetting the tow conveyors are fork trucks, power buggies, hand trucks and gravity conveyors. Fork trucks handle the palletized shipments to and from rail and truck sidings. Tow conveyor trucks, built to S & H specifications, are loaded at the storage racks, then moved to the conveyor line, and unloaded in the packing areas. All wooden pallets used for storage in the warehouse are of one size (36" x 42" x 4 1/2") designed to S & H specifications. Friction-type pallet racks are used throughout. These require no screws or bolts in construction. They are quickly and easily assembled and disassembled.

The back-to-forward flow can easily be seen in

the movement of goods by fork truck from the rail and truck sidings at sides and rear, into the ready storage areas which are more forward. The next movement forward is via the tow conveyor line. At the front are the packing tables, and the scaling and shipping areas.

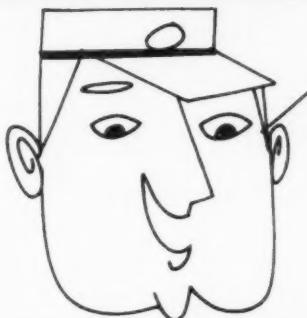
An important aspect of control is in receiving. Companies who supply Sperry & Hutchinson are requested to stamp cartons with a special code indicating color, quantity and the number of stamps required for purchase; this cuts out an onerous marking task at the center. Suppliers are also required to use shipping labels small enough so the S & H address label can be pasted right over it. S & H pre-prints shipping labels with the addresses of the branches serviced, thus conserving time in yet another task.

Packing tables are located in two separate sections in the front of the Chicago shipping center. One section is devoted entirely to mail order shipping, the other to branch shipping. Most loads that come in on the conveyor trucks are picked off at the branch shipping area which is the first to be reached by conveyor line from the inner recesses of the center. Remaining loads are picked off at the mail order area. The conveyor trucks are dismounted at the steel shelving racks especially reserved for mail order. Here the necessary cartons are stored until needed, or unpacked as open stock.

All packing tables are located along gravity conveyor lines to speed the progress of shipments to the scaling area. S & H has designed and constructed its own packing tables for mail order and for branch shipping. An especially designed light weight magnesium shelf order picking truck is used in the packing area. The truck is designed so merchandise carrying similar freight classifications is placed on the same shelf by the order picker. The packing area also contains carton storage, a carton bottom stitcher, gummed tape dispensers, mailing machines and packing and wrapping materials.

Without an alert and forward-looking management who have permitted full play of the creative talents of the engineering and administrative personnel at their disposal the Sperry & Hutchinson operation could not have achieved its present high ratio of efficiency and smoothness. To Mrs. Elaine Pitts herself, a woman creating in a man's job for an organization whose service aims are satisfying women customers, and to such other individuals as James Sumrow, Warehouse Superintendent, Norman Rabson, Warehouse Manager, and Walter Peachey, Assistant Warehouse Manager, goes much of the credit for bringing this modern marvel of receiving and shipping into reality.

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Redesign and Sealer

(Continued from Page 18)

height. Stock rotation presented different problems.

We investigated the use of pallet racks, and found the "Fork-lift truck and pallet" combination the most efficient way to move our product. Secondly, it was found that a pallet 57 inches by 60 inches fitted our requirements.

Pallets ride on two parallel lines of conveyors, 45 inches apart. Adjacent rows of pallets are one foot apart. The fork-truck deposits a pallet of boxes squarely on the loading end of the storage line, then places a second pallet on top of the first. This double-tiered pallet is then pushed forward by the fork-truck until it touches the one on the line ahead of it. In this way the line is completely filled up.

Roller-Pallet Combination

Pallets are removed from the unloading end, and when three or four double pallets have been taken off, those remaining on the line are moved up in a group, pushed by the fork-truck. The roller-pallet combination is so mobile that an average man can shove a double-tiered pallet along quite easily. Uniform pallet heights permit us to use the most efficient ceiling height and make our pallets almost 14 feet high. Higher stacking would cause the bottom boxes to bulge; lower stacking would result in wasted floor space.

These changes have led to the following achievements and improvements in our case-sealing operation:

- 1) Reduction in cost of equipment involved by 80 per cent.
- 2) Reduction in floor area by 75 per cent.
- 3) Through re-designing, reduction in cost of boxes by 5 per cent.
- 4) Reduction in maintenance and handling costs by 50 per cent.

In the warehousing operation, the following results occurred:

- 1) Perfect stock rotation.
- 2) A simple, flexible method of maintaining running inventory was established.
- 3) Incorporated the most economical ceiling height, giving a maximum of floor space.
- 4) Powered all conveyor lines by one portable unit — the fork-lift truck which does double duty as a carrier.
- 5) By using roller conveyor lines, reduced required aisle space by 60 per cent.

So efficient has this operation proven that one lift-truck and two hand trucks are the only equipment required to operate a warehouse of 45,000 square feet with space for 5,500,000 lamps.

30 Years Air Shipping

(Continued from Page 19)

These three and Varney Air Lines were subsequently joined as United Air Lines.

American Railway Express, a predecessor company of the Railway Express Agency, instituted air express service in September, 1927. The original carriers were Western, Colonial and transcontinentally, National Air Transport and Boeing Air Transport. Despite the depression which blighted expansion in the early Thirties, air express showed steady growth. Shipments in 1930 amounted to 286,000 pounds. This increased to 885,000 pounds the following year and to 1,324,000 pounds in 1932.

Express ton miles flown by United exceeded 1,000,000 in 1934, 2,000,000 in 1936 and by 1940 neared 3,000,000. Industrial activity generated by the national defense program on the eve of World War II was reflected in a strong upsurge of air express. To keep up with the flood of shipments, United assigned passenger planes to all-cargo service between Chicago and New York. This was first done in December, 1940. Mail and express were piled on the seats.

A regular schedule of all-cargo flights, operated by DC-3 "flying boxcars," was introduced by United between New York and Chicago in March, 1941. The service was discontinued at the end of May, then reinstated on a permanent basis. In 1942 Cargoliner service was extended west to Salt Lake City. In October of the following year, the company began coast-to-coast Cargoliner operations, using DC-3s with passenger cabins rebuilt to accommodate cargo.

Developed in Wartime

To meet wartime production schedules, a great variety of items never before airborne went aloft. The potential of air shipment was grasped by many for the first time. Here was no novelty, they realized, but a practical shipping tool which could minimize storage and warehousing for certain businesses, keep pace with fast turnover, and develop new markets.

United's cargo experts focused attention on air shipment of perishables. Jointly with Wayne University and the Great Atlantic & Pacific Tea Company, the airline began a research program to determine the value of flying fresh fruits, flowers and vegetables to market. As part of the project, a DC-3 Cargoliner loaded with West Coast seafood and produce was flown to New York in August, 1944. Contents of the plane were served at a banquet for 250 representatives of the food and transportation industries.

Air freight rates at about one-third the cost



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of air express were introduced in 1945, becoming effective on United's system in February, 1946. In that year the company began operating DC-4 Cargoliners. The new planes demanded new techniques in cargo handling. They carried 16 tons at a cruising speed of 230 m.p.h. as against three tons for the DC-3 and speed of 180 m.p.h.

The bucket-brigade system which had been used to on-and-off load planes since the infancy of air cargo was outmoded by DC-4s. The DC-3 door was accessible to cargo handlers standing on the ground but the DC-4 had tricycle landing gear which raised the door well above shoulder height. Fork lifts were brought into use with DC-4s and, in 1949, United acquired mobile conveyor belts. Mechanization enabled the company to keep within the ground-time limits which had been established for fueling and on-and-off loading of DC-3 Cargoliners.

First Year Operations

In the first year of freight operations, United's freight ton miles totaled 4,479,000. Great increases were registered annually thereafter except in the years when several Cargoliners were withdrawn from domestic service and assigned to the Tokyo airlift. In 1955, 40,281,000 tons were carried.

Cut flowers, flown inland from West Coast growers, became the most important type of freight carried by United. In recent years, machines and machine parts have held first place in total pounds flown but flowers remain a very vigorous runner-up. They have the distinct advantage of helping to offset the traditional East-West imbalance which has existed since the time when wagon trains rolled over the Santa Fe Trail.

Many persons are unaware of the vast amounts of mail, express and freight carried on so-called passenger planes rather than all-cargo planes. More than 70 per cent of United's mail and cargo

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is transported on Mainliners. The DC-7, for example, lifts 8,000 pounds of cargo in addition to 58 passengers and a crew of five. Its cargo capacity is greater by one ton than that of the original DC-3 Cargoliners.

United's fleet presently numbers 179 aircraft, with more than 40 new four-engine planes to be added this year and next. Included in the latter are five DC-6A Cargoliners, the first of which enters scheduled service this spring. In capacity, speed and auxiliary equipment, the DC-6As surpass all previous Cargoliners. They will fly coast-to-coast with 30,000 pounds of cargo in less than half a day, which includes an enroute stop. West-bound transcontinental trips will be flown six hours faster than current DC-4 Cargoliner flights; east-bound, five and one-third hours faster.

In 1959 United will introduce DC-8 jet planes which will carry up to 155 passengers and 8,000 pounds of cargo. Freight on these planes will move coast-to-coast in four and one-half hours. This speed becomes slightly incredible when viewed historically as the outgrowth of an industry born just 30 years ago. What the next 30 years will bring is any man's conjecture. Fact already has outdistanced fancy.

Tuning In

(Continued from Page 28)

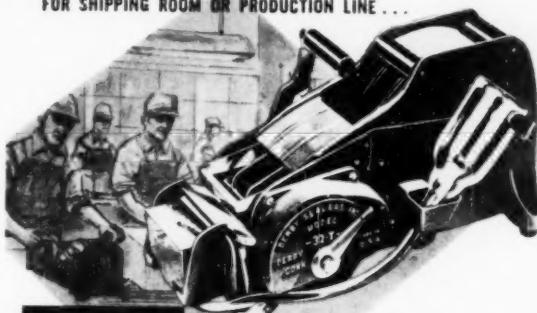
Material Handling and Production Control, General Motors Truck and Coach Division, on "The Potentials of Mechanized Material Handling;" L. Ray Crittenden, Director of Machine Development Laboratories of E. I. Du Pont de Nemours & Company, on "Mechanized Feeding of Machines and Equipment;" Fred V. Gardner, President of Fred V. Gardner & Associates on "Analyzing and Controlling Material Handling Costs;" John D. Sheahan, Partner of Drake, Startzman, Sheahan and Barclay, on "Mechanized Product Assorting and Accumulating;" William M. Aiken, Principal, Methods Engineering Council, on "Work Measurement for Mechanized Material Handling;" and George G. Raymond, Jr., President of the Material Handling Institute and President of The Raymond Corporation, on "Management of Material Handling." A Panel Discussion on "How to Make Mechanized Material Handling a Reality in Your Plant" will be chaired by L. West Shea, Secretary of the Material Handling Institute.

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Wirebound Box Manufacturers Association reported at its annual meeting held in Belleair, Fla., March 19-21.

Unit sales for the year totaled 194,986,265 boxes and crates and the dollar volume for the industry was \$112,162,973, also a new high record, L. S. Beale, secretary, reported. He said that the number of wirebound shipping containers used during the year for industrial products, ranging from fragile and delicate instruments to large and heavy machinery, increased 5.2 percent over the previous record year.

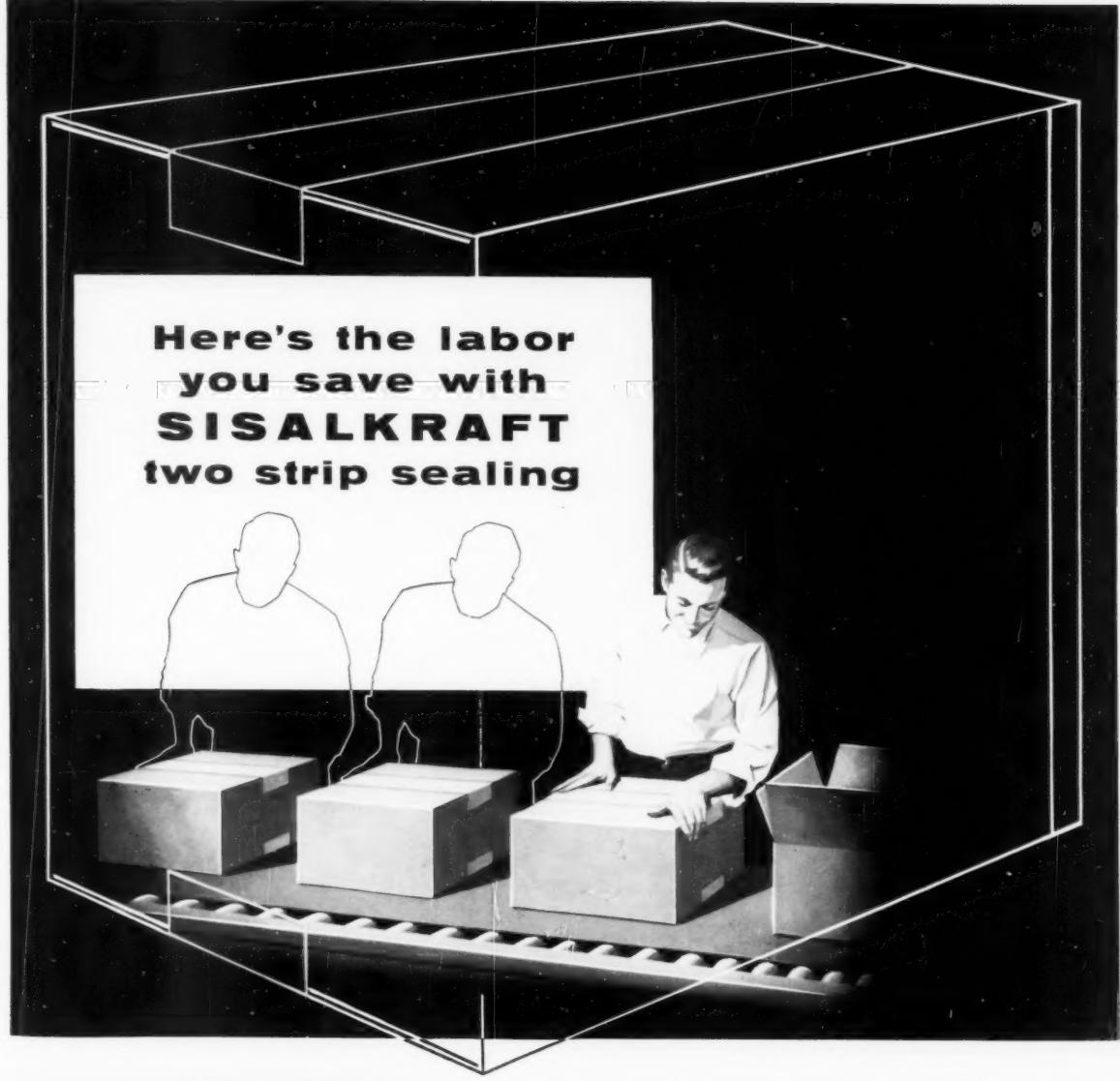
Steady technical advances in engineering and constructing wirebound containers, Beale added, assure continued expansion in the use of such containers for heavy products and bulk materials.

John R. Miller, Jr., T. R. Miller Mill Co., was elected president of the association to succeed Neil A. Fowler, General Box Co., who had served two one-year terms and was elected vice-president to succeed J. A. Sowell.

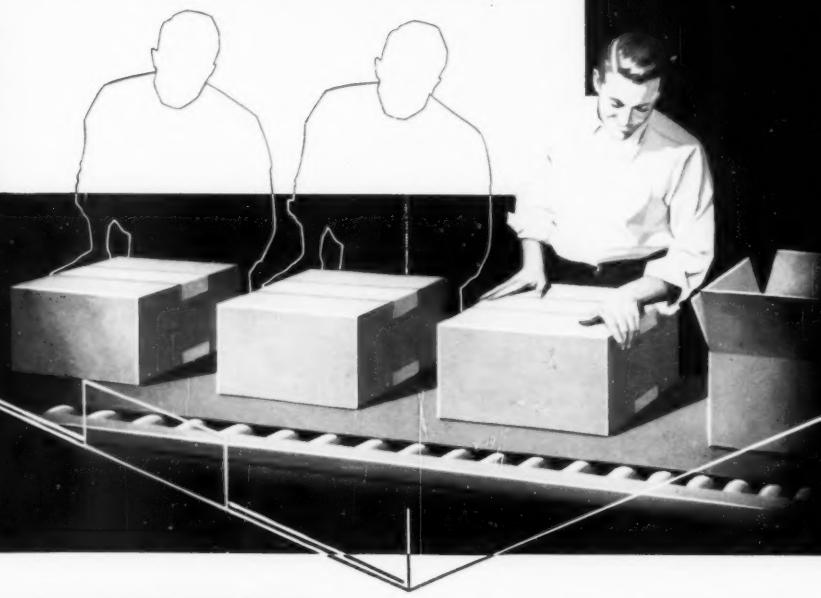
Los Angeles SIPMHE Sponsors "Perfect Shipping" Meeting

Representatives of air cargo, rail, trucking and steamship lines participated as speakers at the "April Perfect Shipping" meeting on April 2 arranged by the Los Angeles SIPMHE Chapter.

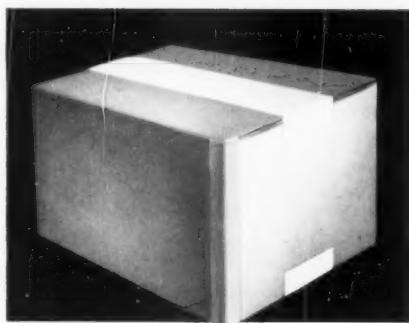
John M. Miller, executive secretary, National Freight Claim Council, American Trucking Associations, spoke on the subject, "Let's Get Euthusiastic About Our Jobs." An up-to-date picture of carrier damage prevention activities and new handling facilities as well as equipment and methods, was given by: Frank G. Reed, Southern Pacific Co.; Jack Convey, The Flying Tiger Lines; and Capt. W. S. Dodge, Matson Steamship Co.



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